MULTI-CD CONTROL TUNER CD DECK
AMPLIFIER

SPARE PARTS MASTER
The Contents on page 4.

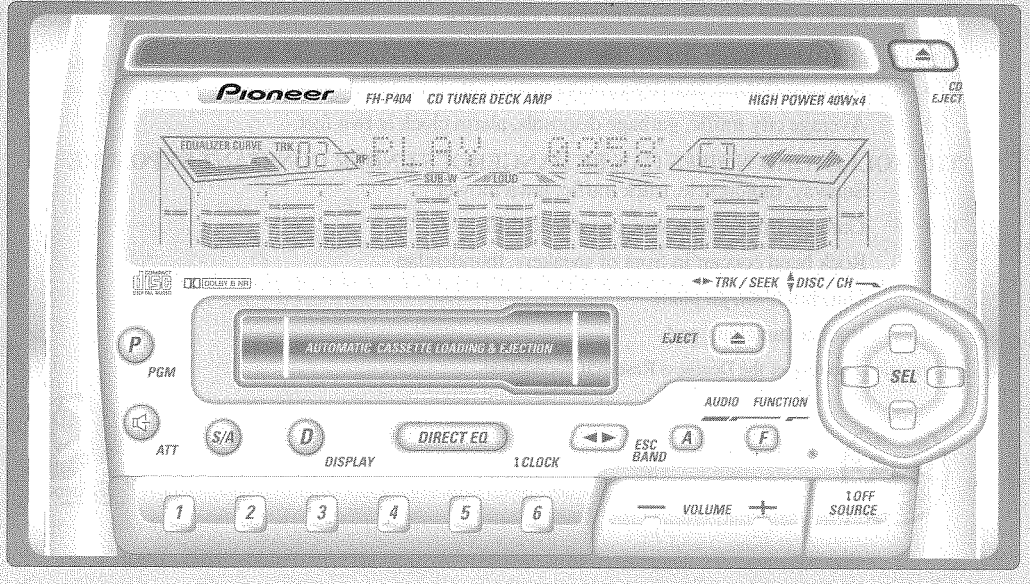
# Operation Manual

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.

This product conforms to CEMA cord colors.

Pioneer

# FH-P404



## *Dear Customer:*

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

**To establish a safe level:**

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

**Once you have established a comfortable sound level:**

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

## We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

| Decibel Level | Example |
|---|---|
| 30 | Quiet library, soft whispers |
| 40 | Living room, refrigerator, bedroom away from traffic |
| 50 | Light traffic, normal conversation, quiet office |
| 60 | Air conditioner at 20 feet, sewing machine |
| 70 | Vacuum cleaner, hair dryer, noisy restaurant |
| 80 | Average city traffic, garbage disposals, alarm clock at two feet. |
| **THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE** | |
| 90 | Subway, motorcycle, truck traffic, lawn mower |
| 100 | Garbage truck, chain saw, pneumatic drill |
| 120 | Rock band concert in front of speakers, thunderclap |
| 140 | Gunshot blast, jet plane |
| 180 | Rocket launching pad |

Information courtesy of the Deafness Research Foundation.

# Precautions

### Important

The serial number of this device is located on the bottom of the unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

**CAUTION: USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

**CAUTION: THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.**

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough for outside sounds to be audible.
- Protect the product from moisture.
- If the battery is disconnected, the preset memory will be erased and must be reprogrammed.

### After-sales Service for Pioneer Products

Please contact the dealer or distributor from where you purchased the product for its after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below:

Please do not ship your product to the companies at the addresses listed below for repair without advance contact.

**U.S.A**

Pioneer Electronics Service, Inc.
CUSTOMER SERVICE
DEPARTMENT
P.O. Box 1760
Long Beach, CA 90801

800-421-1404

**CANADA**

Pioneer Electronics of Canada, Inc.
300 Allstate Parkway
Markham, ON L3R 0P2

(905) 479-4411

For warranty information please see the Limited Warranty sheet included with your product.

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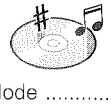
## Listening to Internal CD

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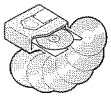
## *OPTION*
## Listening to CDs with Multi CD

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**Just Read This to Use it Immediately!**


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**Listening to Internal CD**

**Listening to the Radio**

**Listening to a Tape**

**Listening to CDs with Multi CD**

**Adjusting the Sound**

**Convenient Functions and Initial Setting**

**Connection and Installation**

**Others**

# Preparing for Use



## How to Read this Instruction Manual

In this operating instruction manual, symbols are printed at the top of each page to indicate the sound source that is operated using the instructions on the page.

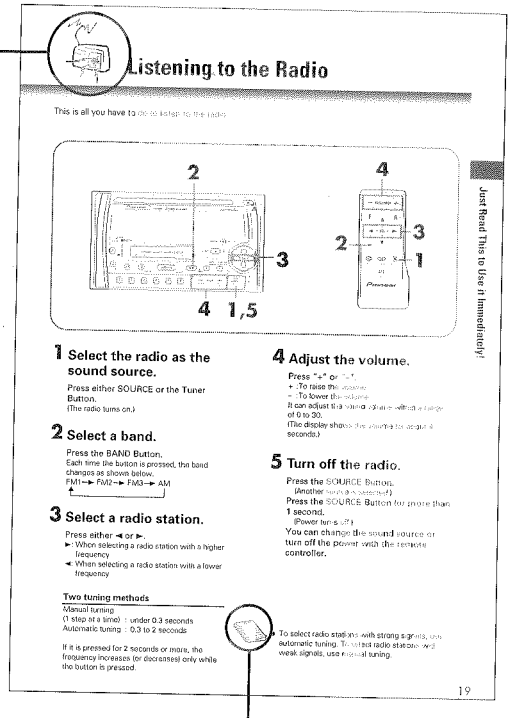
Internal CD

Multi-CD

Tape

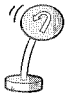
Sound adjustment

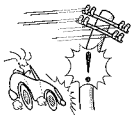
Radio


Listening to the Radio
This is all you have to do to listen to the radio.
2
3
4 1,5
4
3
2
1
1 Select the radio as the sound source.
Press either SOURCE or the Tuner Button.
(The radio turns on.)
2 Select a band.
Press the BAND Button.
Each time the button is pressed, the band changes as shown below.
FM1 → FM2 → FM3 → AM
3 Select a radio station.
Press either ◄ or ►.
►: When selecting a radio station with a higher frequency
◄: When selecting a radio station with a lower frequency
Two tuning methods
Manual tuning
(1 step at a time) : under 0.3 seconds
Automatic tuning : 0.3 to 2 seconds
If it is pressed for 2 seconds or more, the frequency increases (or decreases) only while the button is pressed.
4 Adjust the volume.
Press "+" or "–".
+ :To raise the volume
– :To lower the volume
It can adjust the sound volume within a range of 0 to 30.
(The display shows the volume for about 5 seconds.)
5 Turn off the radio.
Press the SOURCE Button.
(Another sound source turns on.)
Press the SOURCE Button for more than 1 second.
(Power turns off.)
You can change the sound source or turn off the power with the remote controller.
To select radio stations with strong signals, use automatic tuning. To select radio stations with weak signals, use manual tuning.
Just Read This to Use it Immediately!
19

And the following symbols are also used.

Indicates restrictions on the display or functions, and other useful information.


Operating method to be used when you want to stop without completing an operation.


Precautions to be followed when operating the system.

## Remote Controller and Care

### Using the Remote Controller

This product is equipped with a remote controller for convenient operation.

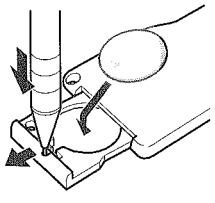
- Point the controller in the direction of the front panel to operate

**Precaution:**

- Do not store the remote controller in high temperatures or direct sunlight.
- The controller may not function properly in direct sunlight.
- Do not let the remote controller fall onto the floor, where it may become jammed under the brake or accelerator pedal.

### Battery

- **Slide the tray out on the back of the remote controller and insert the battery with the (+) and (–) poles pointing in the proper direction.**



**Replacing the Lithium Battery:**

- Use only lithium battery "CR2032", 3 V.

**Precaution:**

- Remove the battery if the remote controller is not used for a month or longer.
- If the event of battery leakage, wipe the remote controller completely clean and install a new battery.

**⚠ WARNING:**

- Keep the Lithium Battery out of reach of children. Should the Battery be swallowed, immediately consult a doctor.

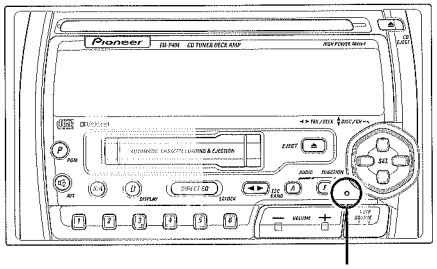
**⚠ CAUTION:**

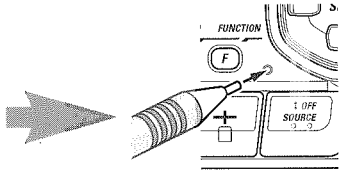
- Do not recharge, disassemble, heat or dispose of battery in fire.
- Use a CR2032 (3 V) Lithium Battery only. Never use other types of battery with this unit.
- Do not handle the battery with metallic tools.
- Do not store the Lithium Battery with metallic materials.
- Dispose of the used Lithium Battery, in compliance with applicable laws and regulations.
- Always check carefully that you are loading battery with its (+) and (–) poles facing in the proper directions.



## Reset Method

After completely connecting the unit or when the display is not correct or the unit does not operate properly, reset it.



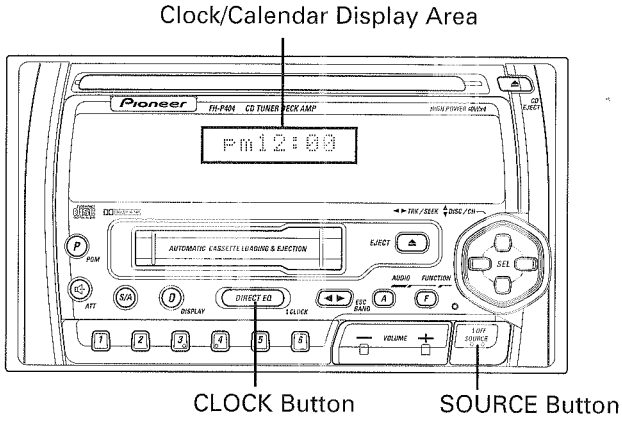




Push the reset button with a pen tip etc.

- The microprocessor in the main unit returns to its initial settings.

- When it is reset, the main unit's memory is erased (clock and preset radio tuning, etc.). Set it again.

## The Clock or Calendar (Date) Display




## Displaying the Clock or Calendar

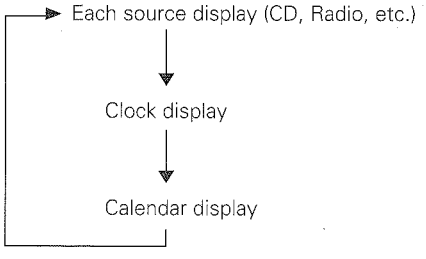
### 1 Turning on the Power

Press the SOURCE button.

### 2 Selecting CLOCK or Calendar

Press the CLOCK button for two seconds or more.

Each time the CLOCK button is pressed for two seconds or more, the display changes in the following sequence.




- The CLOCK button switches the display and equalizer of the clock, Calendar, and each source.
  Press (less than 2 seconds)→ equalizer switching (It is used as the DIRECT EQ button. See Page 21)
  Press (2 seconds or more) → Switches the display of the clock, Calendar, and each source.
- See Page 80 for clock setting instructions.
- See Page 81 for Calendar setting instructions.

## The Initial Settings

When using the unit for the first time, continue by making the following initial settings. (See Pages 79 to 84)

| | | |
|---|---|---|
| Switching to the initial setting mode (See Page 79) | : | It explains the method used to switch to initial setting mode. |
| ↓ | | |
| Setting the clock (See Page 80) | : | It sets the time correctly. |
| ↓ | | |
| Setting the Calendar date (See Page 81) | : | It sets the date correctly. |
| ↓ | | |
| Setting the dummy CD magazine (See Page 82) | : | This is set when not using the multi CD player. |
| ↓ | | |
| Hearing the sound of external units (AUX setting) (See Page 83) | : | This setting is done when external units are connected to the main unit. |

You are recommended to do the following settings as necessary.

Radio Station Registration (See Pages 28 and 30)

It simultaneously registers a number of radio stations to buttons 1 to 6. (Best Stations Memory)

It registers radio stations you wish to hear to buttons 1 to 6 one at a time. (Preset Memory)

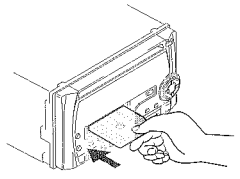
# Names of Components

Numbers in parentheses represent reference pages.

## [Main Unit Components]

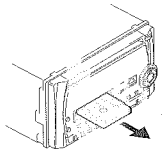
**Tape Insertion Opening**

Holding the tape side to the right, insert the tape.



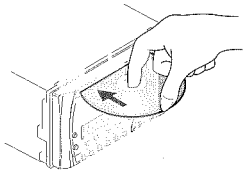
**EJECT Button**

Press to remove the tape.



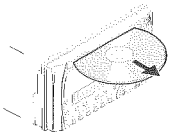
**CD Insertion Opening**

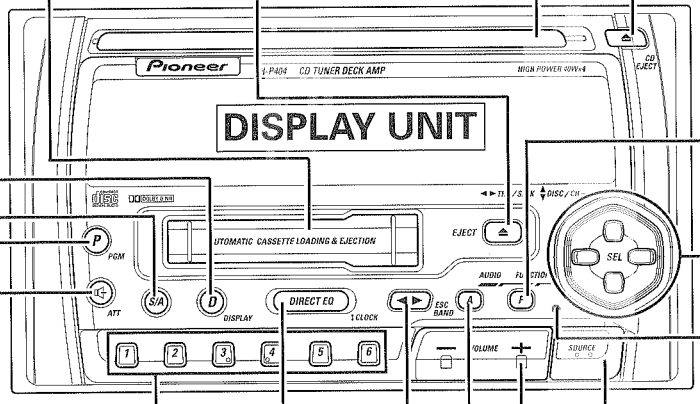
Holding the title surface upwards, push the CD into the opening.



**CD EJECT Button**

Press to remove the CD.






D (display) Button (26, 64)

S/A Button (74)

PGM (program) Button (76)

ATT (attenuator) Button (78)

F (function) Button (22, 24, 28, 29, 35, 44, 76, 79)

◀/▶/▲/▼ Buttons (13, 14)

Reset Button (7)

Buttons 1 to 6 (21, 28, 30, 31, 42)

BAND Button (13, 19, 20, 65)

A (audio) Button (66)

SOURCE Button (16, 79)
Press to turn the power on or off.
Press for more than 1 second to turn the power off.

DIRECT EQ, CLOCK Button (8, 21)

VOLUME Button (17 to 20)
It can adjust the sound volume within a range of 0 to 30.

# [Display Units]

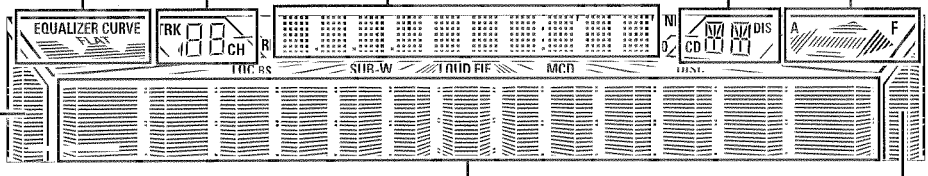
### Equalizer Curve Display
It displays the equalizer curve that is selected.

### Source Display/Multi CD No. Display
It displays the source that is now selected in alphabetic format. And it also displays the disc No. of Multi CD.

### CD Track Number/Radio Station Channel Display
It displays the channel where the radio station is preset or the track number of the CD.

### Source Status/Settings/Comment Display
It displays the source operating status, settings, titles, etc. in alphabet format. The radio frequency and time display are also shown here.
Example: PLAY 00'21"
REPEAT:ON
pm 12:59
81.5 MHz

### Operation Display
It displays the ◄/►/▲/▼ buttons on the main unit or main controller that can be operated.




### Spectrum Analyzer Display
It displays 7 kinds of Spectrum Analyzer.

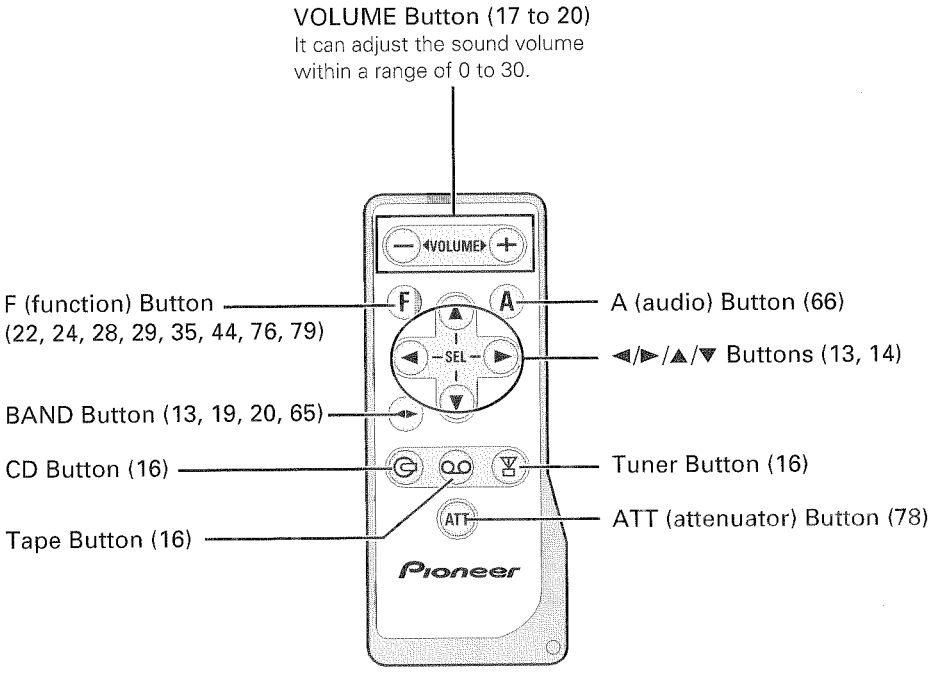
### Side Bar
It includes three kinds of light displays. And it displays the volume level for about 4 seconds after you adjust the volume.

### Side Bar
It includes three kinds of light displays. And it displays the volume level for about 4 seconds after you adjust the volume.

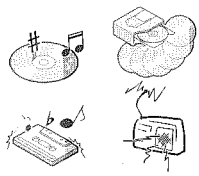
**Demo Mode**
With the power off, press button 6.
(Demo Mode ON)
Demonstration is displayed on the display.

Press button 6 again to turn Demo Mode off.

## [Remote Controller Unit]


VOLUME Button (17 to 20)
It can adjust the sound volume within a range of 0 to 30.
F (function) Button (22, 24, 28, 29, 35, 44, 76, 79)
BAND Button (13, 19, 20, 65)
CD Button (16)
Tape Button (16)
A (audio) Button (66)
◄/►/▲/▼ Buttons (13, 14)
Tuner Button (16)
ATT (attenuator) Button (78)
VOLUME
SEL
ATT
Pioneer

- You can operate the main unit with the separately sold steering remote controller unit (CD-SR77) (below, called the "steering remote control"). But there are some functions that can not be controlled by this remote control.
- See the Steering Remote Control Users Manual for the operation and handling of the steering remote control.
- See Page 7 for remote controller battery replacement instructions.

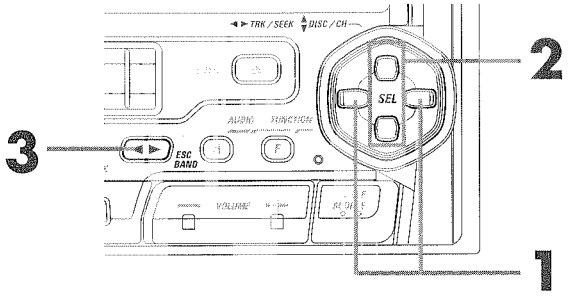


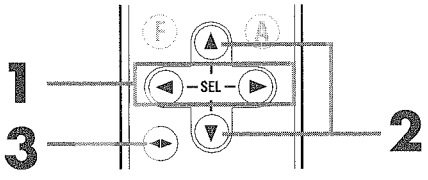
# Basic Operating Instructions

This section explains the basic main unit operating instructions. It explains the frequently used buttons and guide displays.

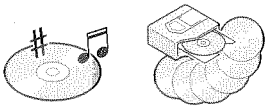
## Operating the Frequently Used Functions

The frequently used functions are operated using the following buttons.




**Listening to a CD**



Track selection, fast forward, fast reverse ⇨ Press **1**

Switching to another CD ⇨ Press **2**
(Only when connected to a Multi CD)

Changing the Multi CD ⇨ Press **3**
(Only when connected to two or more Multi CD)

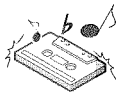
**Listening to the Radio**

Auto/manual station selection ⇨ Press **1**

Switching between preset radio stations ⇨ Press **2**

Switching bands (FM/AM) ⇨ Press **3**

**Listening to a tape**



Track selection, fast forward, rewind ⇨ Press **1**

Changing side being replayed ⇨ Press **3**

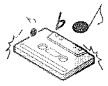
- A beeping sound will be output by the main unit when a button is pressed correctly.

# Basic Operating Instructions (continued)

These are the major symbols appearing on this page. The numbers in parentheses under symbols on this page are reference page numbers.

Internal CD

Radio


Tape

Multi CD

Audio

## Convenient Function Operations

The main unit provides 4 operation modes used to set all its functions. The ◄/►/▲/▼ buttons select the functions and turn them on and off. Press the BAND button to shut off a function in any operation mode.

### 1. Function Mode

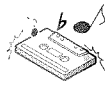
In this mode, you can set various performance methods for each source.

**Basic Operating Method**

Press the F Button to select a function, then use the ◄/►/▲/▼ buttons to set an item or to turn it on or off.

(22)

(28)


(37)

(44)

### 2. Fine Setting Mode

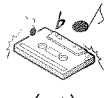
In this mode, you can perform convenient fine function settings that allow you to use the main unit skillfully. You can enter CD titles for example.

**Basic Operating Method**

After pressing the F Button for 2 seconds or more, select a function with the F button, then use the ◄/►/▲/▼ buttons to set an item or turn it on or off.

(24)

(32)


(76)

(44)

### 3. Initial Setting Mode (See Pages 79 to 84)

In this mode, you can set external units, the timer, etc.

**Basic Operating Method**

After pressing the F Button for 2 seconds or more with the power off, select a function with the F Button, then use the ◄/►/▲/▼ buttons to set an item or turn it on or off.

### 4. Audio Adjustment Mode

You can use this to adjust sound quality: fader, balance, or loudness.

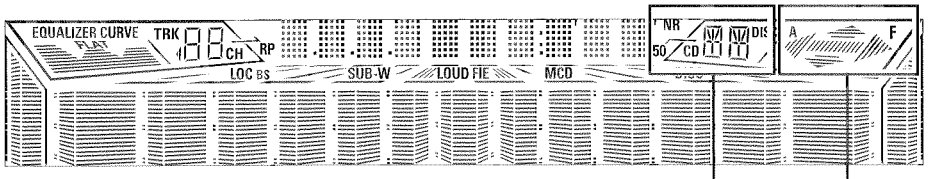
**Basic Operating Method**

Select a function with the A Button, then use the ◄/►/▲/▼ buttons to set an item or turn it on or off.

(66~73)

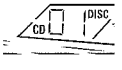
## Guide Displays and Operating Modes

Look at the display on the main unit to see guide displays that indicate the buttons that can be used or each button's function.

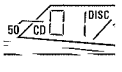



**Each source is displayed as follows**

This is displayed when the internal CD is being replayed.




This is displayed when a Multi CD (6 or 12 discs) is being replayed.



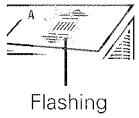

This is displayed when Multi CD (50 discs) is being replayed.

This is displayed when a tape is being replayed.

This is displayed when the radio is on.

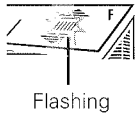
**Buttons that can be operated are displayed. The following are the important displays and their meaning.**

You can select the track with the ◀/▶ buttons and the disc with the ▲/▼ buttons.




Flashing

This means that the ▲/▼ buttons and the A Button can be operated.



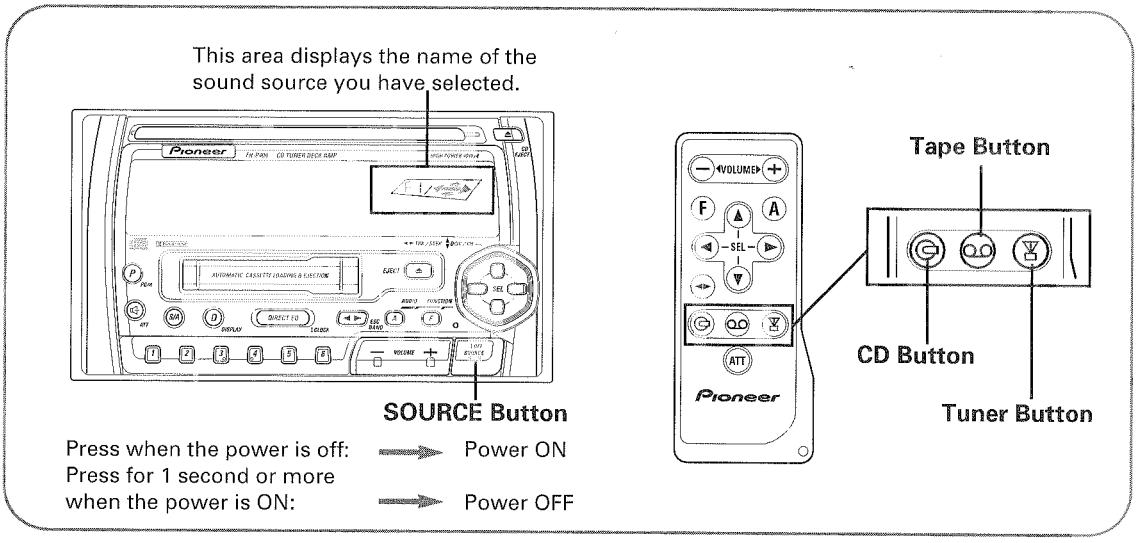

Flashing

This means that the ▲/▼ buttons and the F Button can be operated.

# Selecting the Sound Source You Want to Hear



You can select the sound source your want to hear.

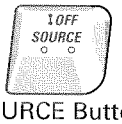

This area displays the name of the sound source you have selected.
SOURCE Button
Press when the power is off: → Power ON
Press for 1 second or more when the power is ON: → Power OFF
Tape Button
CD Button
Tuner Button

## Operation Using the Main Unit

### Press the SOURCE Button.

Each time the button is pressed, the sound source changes as shown below.

Internal CD → Radio (FM/AM) → Tape → Multi CD* → AUX (External Unit)* → Internal CD



SOURCE Button

*: Indicates sources selected only when the corresponding separately sold product is connected.

- The AUX (External Unit) source is not selected when the AUX setting (see Page 83) is not ON.

## Operation Using the Remote Controller

### Press the CD Button.

Each time the button is pressed, the sound source changes as shown below.

Internal CD → Multi CD* → Power OFF → Internal CD

CD Button

### Press the Tape Button.

Each time the button is pressed, the sound source changes as shown below.

Tape → AUX (External Unit)* → Power OFF → Tape

Tape Button

### Press the Tuner Button.

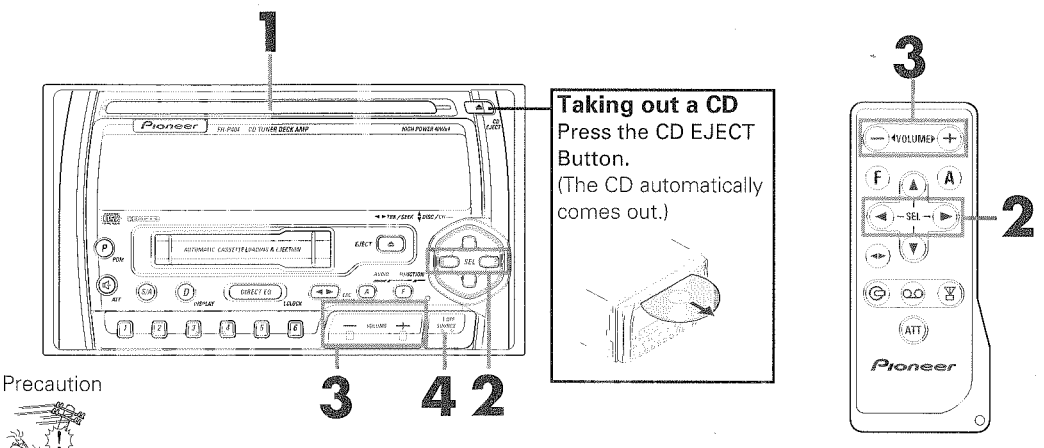
Each time the button is pressed, the sound source changes as shown below.

Radio (FM/AM) → Power OFF → Radio (FM/AM)

Tuner Button

# Listening to a CD

This is all you need to do to hear a CD played on the internal CD player.






## 1 Insert the CD.

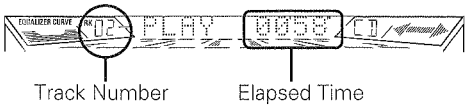
With the title surface upwards, insert the CD in the CD insertion opening.
(It starts to replay automatically.)

## 2 Select the track you want to hear.

Press either the ◄ or the ► button.
►: To select the next track
◄: To select the previous track
It switches each time it is pressed (less than 0.5 seconds).
Press it a number of times equal to the tracks you want to skip.

### Fast Forward/Fast Reverse

Press the ◄ or the ► button.
►: Fast forward
◄: Fast reverse
Press it continuously (more than 0.5 seconds).
Release it where you want to hear the music.




## 3 Adjust the volume.

Press "+" or "–".
+ :To raise the volume
– :To lower the volume
It can adjust the sound volume within a range of 0 to 30.
(The display shows the volume for about 4 seconds.)

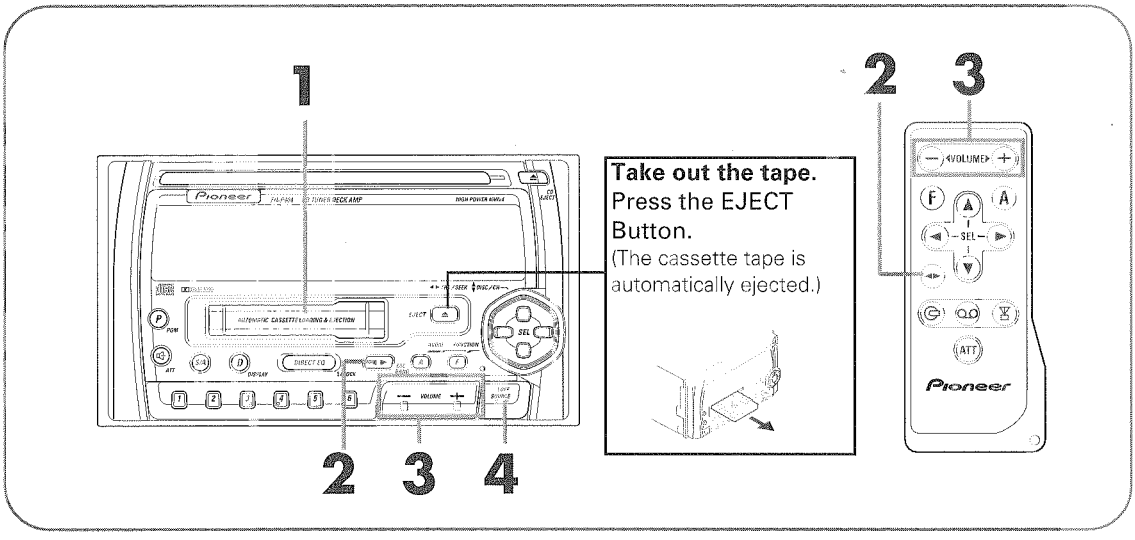
## 4 Stop CD replay.

Press the CD EJECT Button.
(CD is ejected → Power turns off.)
Press the SOURCE Button.
(Another source is selected.)
Press the SOURCE Button for more than 1 second.
(Power turns off.)
You can change the sound source or turn off the power with the remote controller.

- You can turn off the power or switch to another source (radio or tape) with the CD still set.

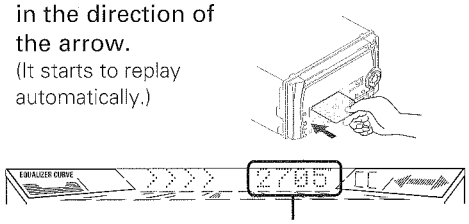
# Listening to a Tape

This is all you have to do to hear a tape with the internal cassette deck.




## 1 Put in the tape.

Holding the tape side to the right, put it in the direction of the arrow.
(It starts to replay automatically.)




Replay Counter

## 2 Select the side to replay.

Press the BAND Button.
Each time you press this button, the side that is replayed changes.

## 3 Adjust the volume.

Press "+" or "–".
+: To raise the volume
–: To lower the volume
It can adjust the sound volume within a range of 0 to 30.
(The display shows the volume for about 4 seconds.)

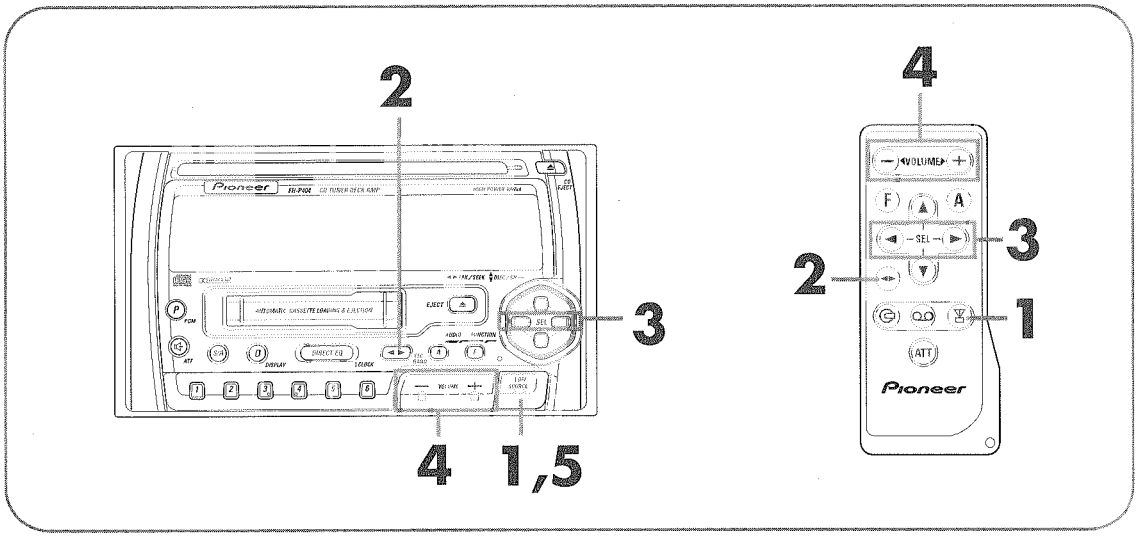
## 4 Stop tape replay.

Press the EJECT Button
(Tape is ejected → Power turns off.)
Press the SOURCE Button.
(Another source is selected.)
Press the SOURCE Button for more than 1 second.
(Power turns off.)
You can change the sound source or turn off the power with the remote controller.

- The replay counter counts the time that the tape is replayed. The count stops during fast forward or rewind.
- The replay counter resets to 00'00" when a new tape is inserted, the replay side is changed, or when it rewinds to the beginning of the tape.
- You can turn off the power or change to another sound source (radio, internal CD) with a tape set in the tape deck.
- When a metal or chrome tape is set in the tape deck, the work "METAL" is displayed for about 2 seconds.

# Listening to the Radio

This is all you have to do to listen to the radio.




## 1 Select the radio as the sound source.

Press either SOURCE or the Tuner Button.
(The radio turns on.)

## 2 Select a band.

Press the BAND Button.
Each time the button is pressed, the band changes as shown below.
FM1 → FM2 → FM3 → AM

## 3 Select a radio station.

Press either ◄ or ►.
►: When selecting a radio station with a higher frequency
◄: When selecting a radio station with a lower frequency

**Two tuning methods**

Manual turning
(1 step at a time) : under 0.3 seconds
Automatic tuning : 0.3 to 2 seconds

If it is pressed for 2 seconds or more, the frequency increases (or decreases) only while the button is pressed.

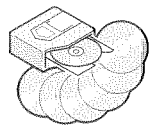
## 4 Adjust the volume.

Press "+" or "–".
+ :To raise the volume
– :To lower the volume
It can adjust the sound volume within a range of 0 to 30.
(The display shows the volume for about 4 seconds.)

## 5 Turn off the radio.

Press the SOURCE Button.
(Another source is selected.)
Press the SOURCE Button for more than 1 second.
(Power turns off.)
You can change the sound source or turn off the power with the remote controller.

- To select radio stations with strong signals, use automatic tuning. To select radio stations with weak signals, use manual tuning.



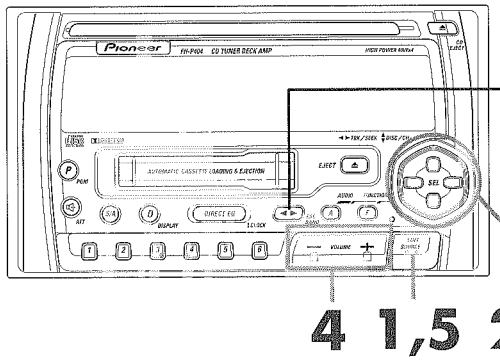
OPTION

# Listening to a CD with Multi CD

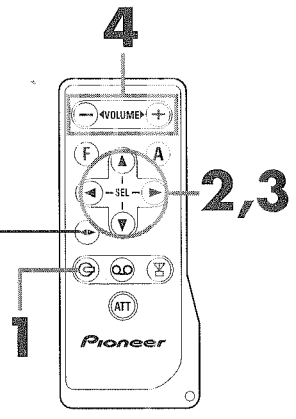


This is all you have to do to listen to a CD on a separately sold Multi CD Player.

**This is a function when Multi CD Players are connected.**




**When two or more Multi CD Players are connected:**
Press the BAND Button to select the one you want to use.




## 1 Change the sound source to Multi CD.

Press the SOURCE or CD Button.
(Multi CD begins to play.)
When two or more MULTI CD Players are connected, press the BAND button to select the Multi CD you want to hear.

## 2 Select the CD you want to hear.

Press the ▲ or the ▼ button.
▲: To select the next CD
▼: To select the previous CD

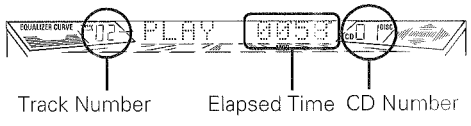
## 3 Select the track you want to hear.

Press the ◄ or the ► button.
►: To select the next track
◄: To select the previous track
It switches each time it is pressed (less than 0.5 seconds).
Press it a number of times equal to the tracks you want to skip.

### Fast Forward/Fast Reverse

Press the ◄ or the ► button.
►: Fast forward
◄: Fast reverse

Press it continuously (more than 0.5 seconds).
Release it where you want to hear the music




## 4 Adjust the volume.

Press "+" or "–".
+ : To raise the volume
– : To lower the volume
It can adjust the volume within a range of 0 to 30. (The display shows the volume for about 4 seconds.)

## 5 Stop Multi CD replay.

Press the SOURCE Button.
(Another source is selected.)
Press the SOURCE Button for more than 1 second.
(Power turns off.)
You can change the sound source or turn off the power with the remote controller.

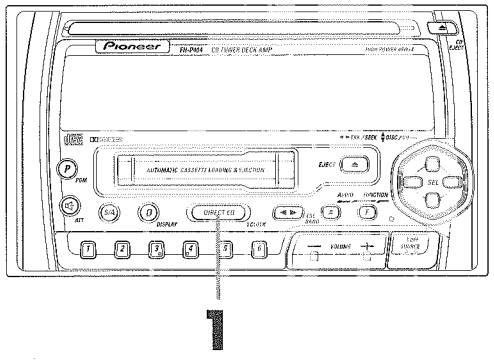
- You can connect two or more Multi CD Players with the separately sold IP- BUS expansion adapter (CD-P33 etc.) and a number of Multi CD units that can be connected to a single main unit (CDX-P620S, etc.).

- The following words are displayed.
  READY : The player is preparing for use.
  NO.MAGAZINE: A magazine is not inserted in the Multi CD Player.

# Adjusting the Sound Quality to Match the Music

## Direct Equalizer

Three equalizer curves suitable for different musical genres have been provided along with one flat curve that does not perform any compensation. You can choose the one you prefer.

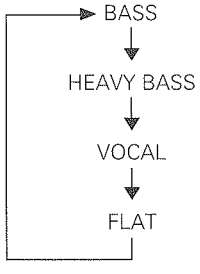





### 1 Select the equalizer curve.

Press the DIRECT EQ Button.

Each time the button is pressed, the equalizer curve changes as shown below.



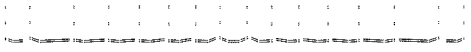

#### Examples of Equalizer Curves

**BASS**

**HEAVY BASS**

**VOCAL**

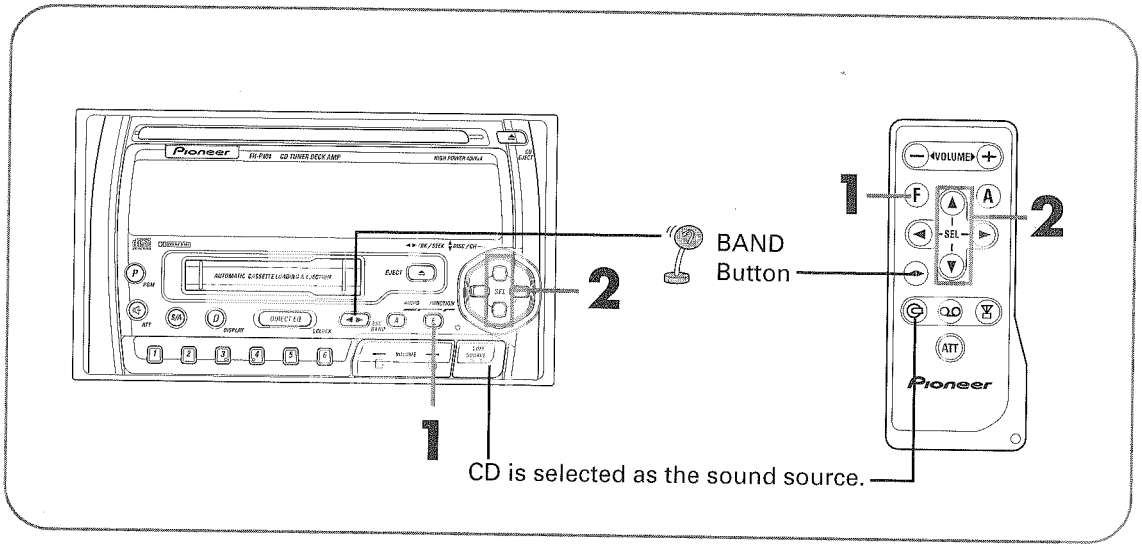
**FLAT**



- You can choose the equalizer curve suited to each sound source.
- The setting is about the same for internal CD and Multi CD.

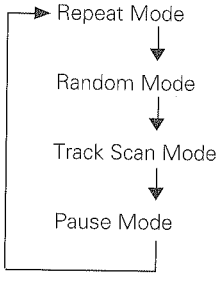
# Changing the CD Performance Mode

You can change the performance mode of the internal CD player.




## 1 Change the Function Mode.

Press the F Button.
Each time the button is pressed, the mode changes as shown below.




## 2 Turn on the selected function.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

When this operation is completed, press the BAND Button to cancel the Function Mode.

### When you want to stop without completing an operation

Press the BAND Button.
Function Mode is canceled.
It is automatically canceled if you do not perform any operation for about 30 seconds.

## Function Modes

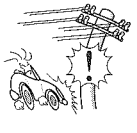
**Repeat Mode**
Plays the present track repeatedly.

**Random Mode**
Selects the next track at random.

**Track Scan Mode**
This mode plays back approximately the first 10 seconds of each track one after another. When a track that you want to hear begins to play, cancel Scan Mode. (About 30 seconds after scan replay begins, Function Mode is automatically canceled. When this happens, reselect Track Scan Mode, then cancel Scan Replay.)

**Pause Mode**
This temporarily stops CD replay. During initial setting, this mode is programmed by pressing the PGM Button. (See Page 76 for the PGM Button.)

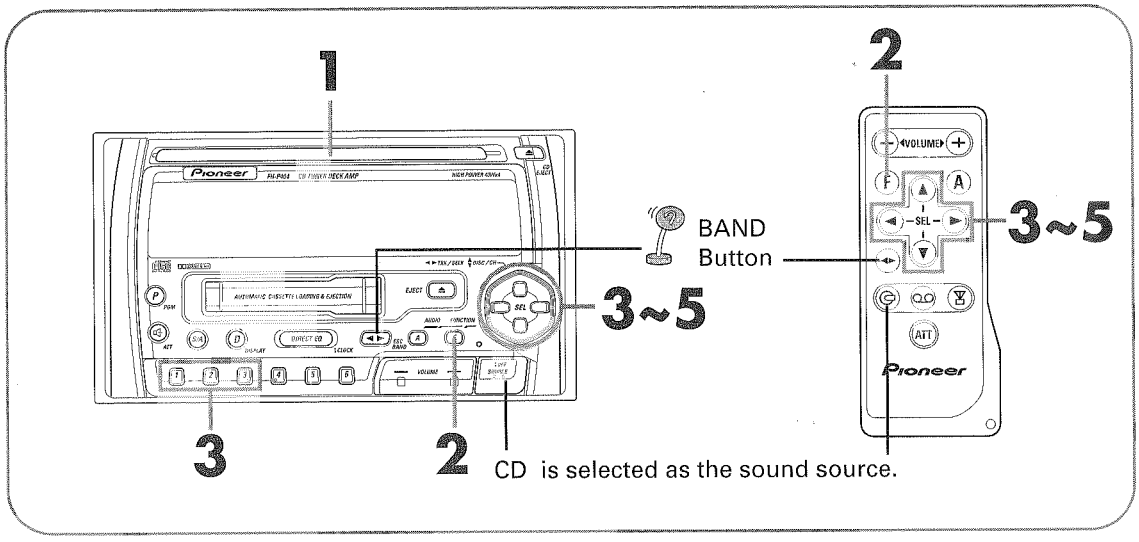
Precaution



- When scan replay returns to the track that was the first that was scan replayed, this mode is automatically canceled.

# Titling a CD

To display the title of a CD (see Page 26), preset the title in advance.




## 1 Replay the CD whose title you wish to preset.

Holding the title surface upwards, push the CD into the opening. (It begins to replay automatically.)

## 2 Select Title Enter Mode.

Press the F Button for 2 seconds.

This is displayed for about 2 seconds.

## 3 Enter the title.

### ■ When selecting the letters to enter

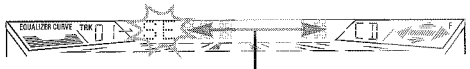
Press the ▲ or ▼ button.
▲: To select the next letter
▼: To select the previous letter

To change the letter selected, press button 1 or 2.

| Button pressed | : Selected letter |
|---|---|
| Button 1 | : a to z, space (_) |
| ↕ Button 1 (Changes each time the button is pressed) | : A to Z, numbers (0 to 9), symbols ( ! " # ¤ % & ' () * + , – . / : ; < = > ? @ [ \ ] – \|\| { \| } ¯ ), space (_) |
| Button 2 | : Number (0 to 9), symbols ( ! " # ¤ % & ' () * + , – . / : ; < = > ? @ [ \ ] – \|\| { \| } ¯ ), space (_) |

### ■ When selecting the entry location

Press the ◄ or ► Button.
►: Moves it to the right
◄: Moves it to the left



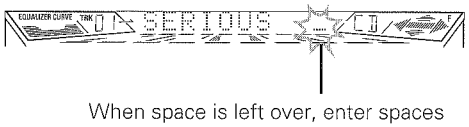
Enters up to 10 letters.

**When you want to stop without completing an operation**

Press the BAND Button.

To stop during title entry (when the letters are flashing), press the BAND Button to cancel Title Entry Mode. (In this case, the title that was being entered is not preset.)

## 4 Make the 10th position flash to complete the entry of the title.




When space is left over, enter spaces until the 10th position flashes.

## 5 Preset the title you have entered.

Press the ► Button.

The entry location stops flashing and the title you have entered is preset.

To end the operation, press the BAND Button to cancel Title Entry Mode.

### Title Display

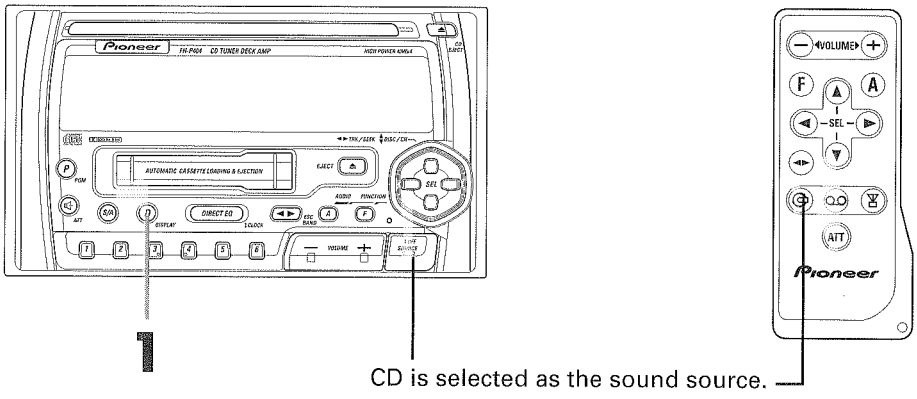
The Title Display is a function that lets you enter and preset a CD title in advance so that it appears on the display.

- You can enter a title with up to 10 letters.
- You can preset titles for up to 48 CD in the internal CD.
- If you enter more than 48 titles, the earliest CD title you recorded is cleared and the new CD title is preset.
- The title is not cleared when the CD is ejected. The title of this CD can be displayed when the CD is set in a Multi CD unit. (When you set a CD with an entered and preset title in CD-TEXT (See Page 61) in a Multi CD that is compatible with CD TEXT, the title entered to the main unit is not displayed.
- When Multi CD Players are combined, it is possible to preset up to 100 CDs.

# Displaying the Title of a CD



You can display the title of CD.

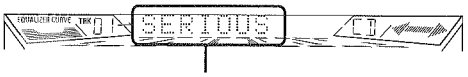



## 1 Change the display.

Press D Button.

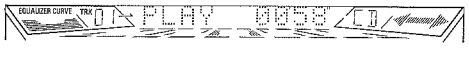
Each time you press the button, the display changes.

**Title Display**




Entered Title

**Elapsed Time Display**

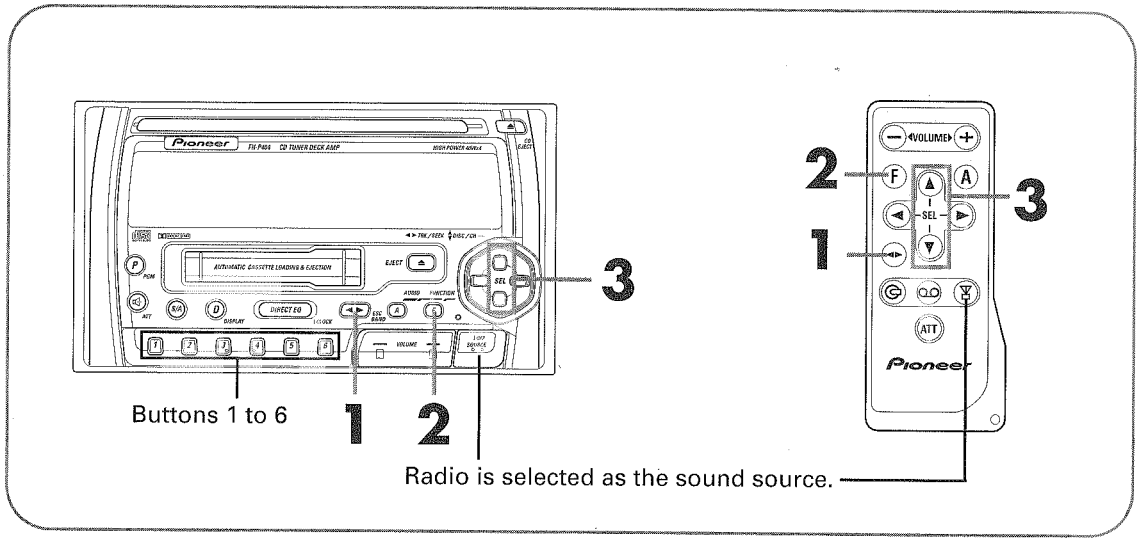



- If the display is changed to title display while a CD whose title has not been entered is playing, "NO TITLE" is displayed.

# Automatically Presetting Multiple Radio Stations



You can search for radio stations whose reception is good and preset them automatically to buttons 1 to 6.




## 1 Select the band you want to preset.

Push the BAND button.

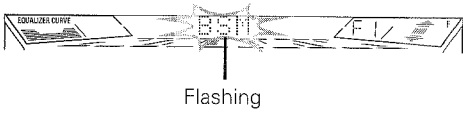
## 2 Change to BSM Mode.

Press the F Button.
BSM is displayed.

BSM means Best Stations Memory.

## 3 Start BSM.

Press the ▲ Button (Press the ▼ button to stop the operation.)
BSM begins to flash in the display.




Flashing

When presetting is completed, the display stops flashing and the radio station preset with Button 1 is received.

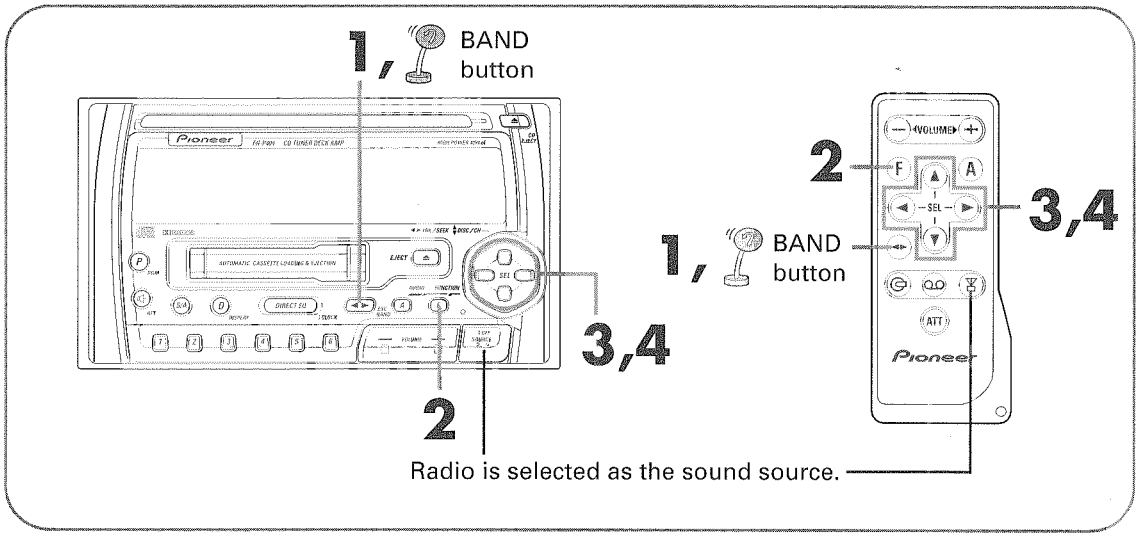
When the operation is completed, press the BAND Button to cancel BSM Mode.

- When there are fewer than 6 radio stations with good reception, some previously preset radio stations are not canceled.

# Switching the Local Station Function On and Off

Local Station

The local station function is useful when noise is included when receiving the FM/AM broadcasting.




## 1 Select the band you want to preset.

Push the BAND button.

## 2 Change to LOCAL Mode.

Select by pressing the F Button.
The mode will be switched as follows each time the button is pressed.

## 3 Turn on LOCAL.

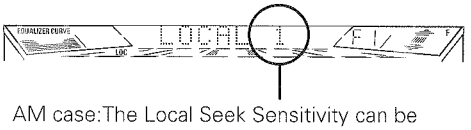
Press the ▲ button (select the ▼ button to turn off).

### When you want to stop without completing an operation

Press the BAND Button.
The function mode is canceled. The function mode is also automatically canceled when no operation occurs within about 30 seconds.

## 4 Adjust the Local Seek Sensitivity.

Push the ◄ or ► button.
►: To increase the Local Seek Sensitivity
◄: To reduce the Local Seek Sensitivity




AM case: The Local Seek Sensitivity can be adjusted from 1 to 2.
FM case: The Local Seek Sensitivity can be adjusted from 1 to 4.

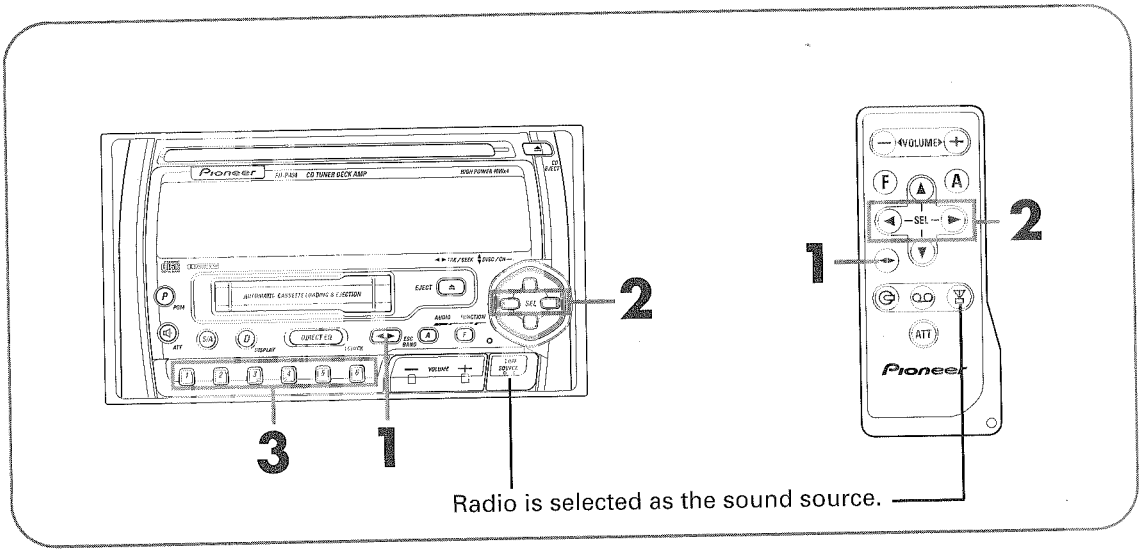
### About the local station function

When local mode is set, the receiving signal sensitivity level used during seek tuning is decreased so that only relatively strong broadcast signals are selected. This function is useful when selecting stations at night, when you are in a region where there are many broadcast stations, or when seek tuning stops on a station including a lot of noise.

# Presetting a Radio Station You Want to Hear



You can preset radio stations you want to hear to buttons 1 to 6 manually one at a time.




## 1 Select the band you want to preset.

Press the BAND Button.

## 2 Select the radio station you want to preset.

Press either ◄ or ►.

►: When selecting a radio station with a higher frequency

◄: When selecting a radio station with a lower frequency

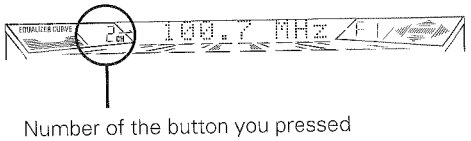
**Two tuning methods**

Manual turning
(1 step at a time) : under 0.3 seconds
Automatic tuning : 0.3 to 2 seconds

If it is pressed for 2 seconds or more, the frequency increases (or decreases) only while the button is pressed.

## 3 Preset the radio station.

Press one button from 1 to 6 for 2 seconds or more.
(A beeping sound is heard if it is correctly preset.)

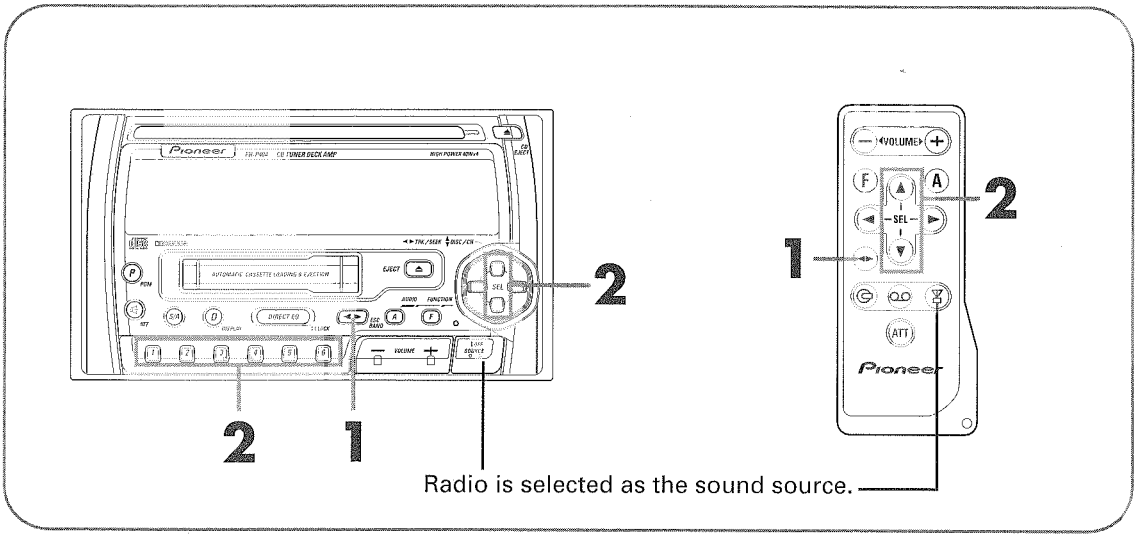



Number of the button you pressed (preset number)

# Calling a Preset Radio Station



You can receive a preset ratio station with a single button operation.




## 1 Select the band that you have preset.

Press the BAND Button.

## 2 Call the radio stations you have preset.

### ■ Direct Call

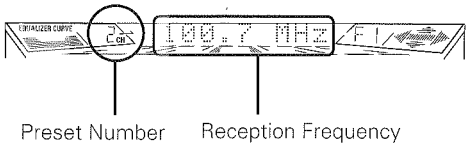
Push the number from 1 to 6 of the radio station you want to hear.

### ■ Sequential Call

Press the ▲ or ▼ Button.

▲ : To call the radio station preset to the next number

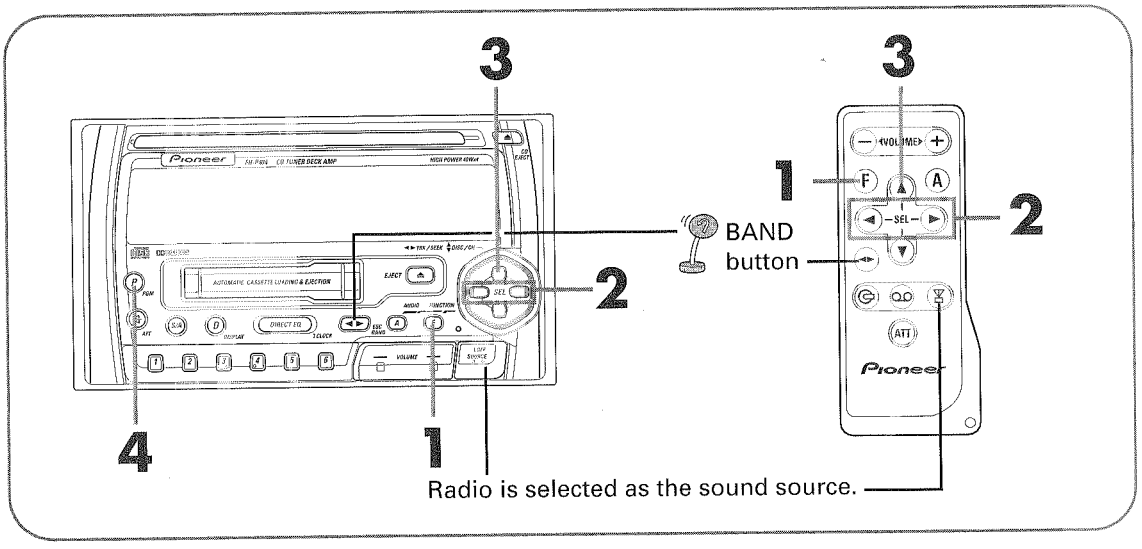
▼ : To call the radio station preset to the previous number



# Learning Frequently Used Radio Functions



Functions can be learned and set on PGM button for each source. The learned function can be used in ordinary playback. (BSM is learned in the initial setting.)




## 1 Select the programmable function setting mode.

Hold the F button for 2 seconds or longer.

## 2 Select a function to learn.

Press the ◄ or ► button.
The mode will be switched as follows each time the button is pressed.

BSM (best stations memory)
(see page 28)

LOCAL (local station)
(see page 29)

## 3 Learn the selected function.

Press the ▲ button.

Cancel the programmable function setting mode by pressing the BAND button after operation.

## 4 Use the learned function.

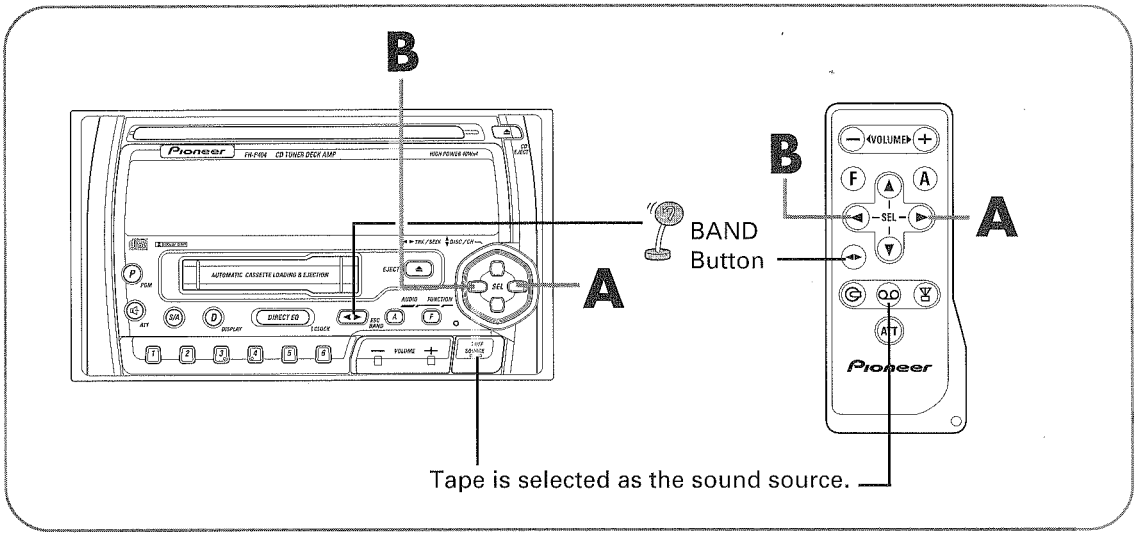
Press the PGM button.
Use the learned function in the method shown below.

| Function | Press | Hold down for 2 seconds or longer |
|---|---|---|
| BSM | OFF | ON |
| LOCAL | ON/OFF | Entering the Local Seek Sensitivity mode |

# Fast Forward, Rewind, or Search



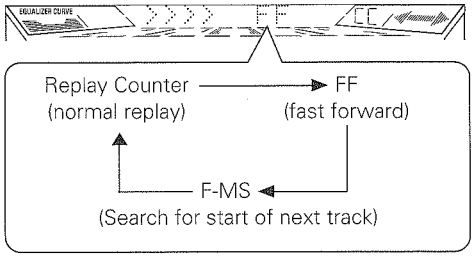
You can fast forward or rewind to begin playback with a track you want to hear. And it is easy to search for the track you want to hear next or the one you are already listening to.




## A Fast forward or search for start of next track.

Press the ► Button.

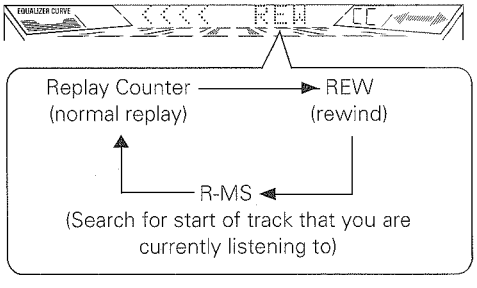
Each time the button is pressed, the display changes as follows.




## B Rewind or search for start of track that you are currently listening to.

Press the ◄ Button.

Each time the button is pressed, the display changes as follows.



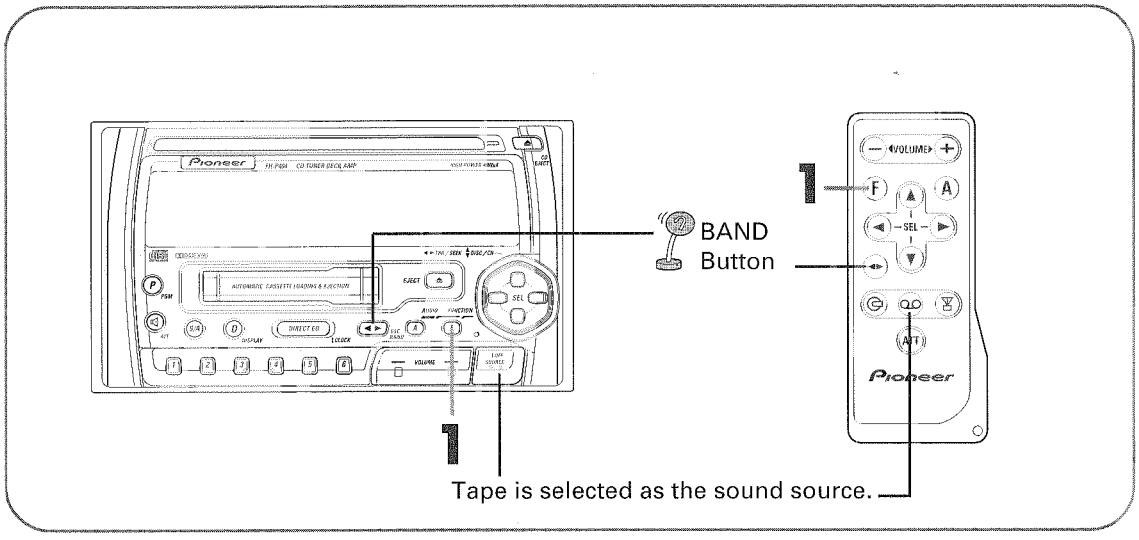

### When you want to stop without completing an operation

Press the BAND Button.

Press the BAND Button to cancel fast forward, rewind, or search.

# Changing Mode

You can change the mode of the tape to enjoy various musical performances.




## 1 Change to Function Mode.

Press the F Button.
Each time the button is pressed, the display changes as shown below.

Repeat Mode (See Page 36):
When you want to play the present track repeatedly

↓

Scan Mode (See Page 37):
When you want to search for the track you want to hear.

↓

Blank Skip Mode (See Page 38):
When you want to automatically fast forward over long parts with no sound.

↓

RI Mode (See Page 39):
When you want to listen to the radio during fast forward or rewind.

↓

Dolby B NR Mode (See Page 40):
When listening to a tape recorded using a Dolby NR System.

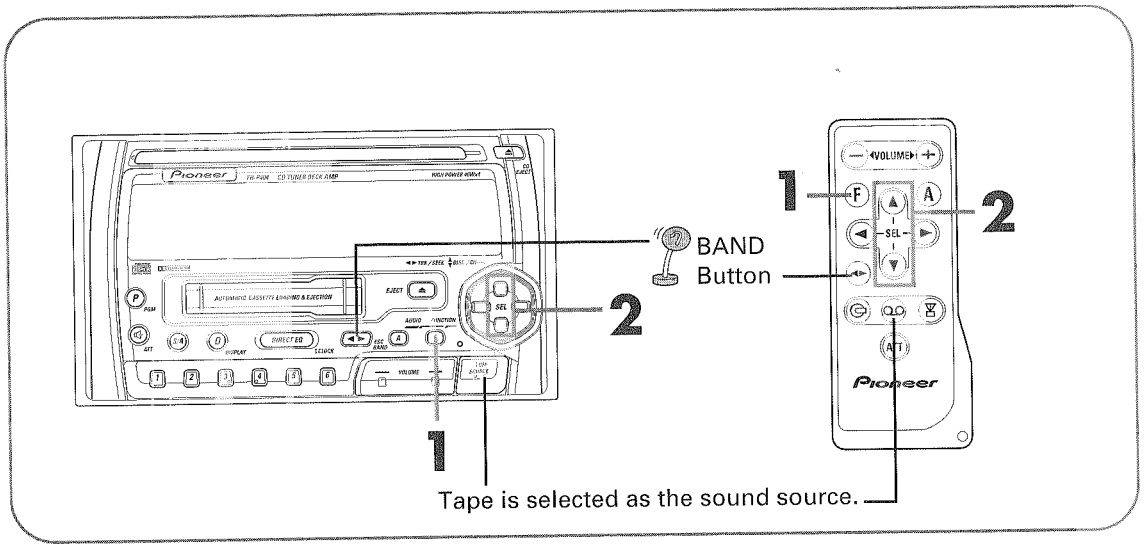
### When you want to stop without completing an operation

Press the BAND Button.
Press the BAND Button to cancel Function Mode. (If no operation is performed for 30 seconds, it is canceled automatically.)

# Listening to the Same Track Again



You can repeat the track you are listening to.




## 1 Select Repeat Mode.

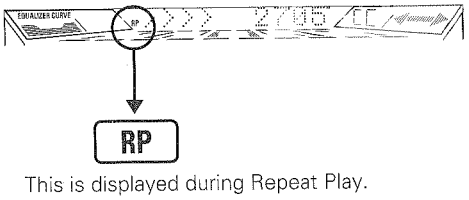
Press the F Button to select this mode.
(See Page 35)

## 2 Turn on Repeat Play.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

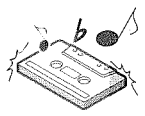
The track you are listening to is played again.

When the operation is complete, press the BAND Button to cancel Function Mode.




This is displayed during Repeat Play.

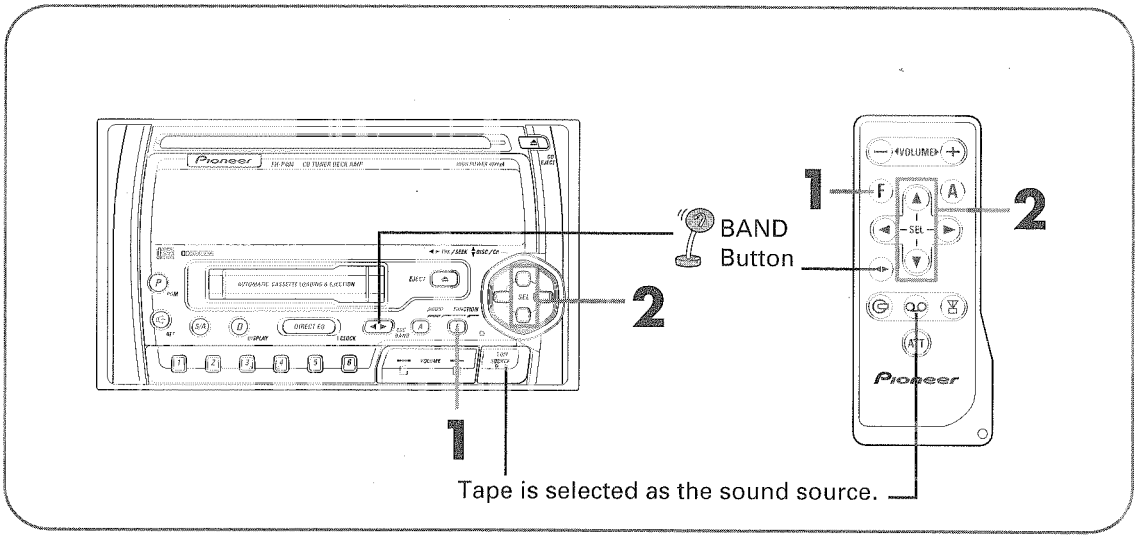
- Repeat Play is canceled by fast forward or rewind and by search. It is impossible to turn on Repeat Play during fast forward, rewind, or search.
- Except in Function or Program Function setting and Audio Adjustment Mode, Repeat Play is off even if the BAND Button is pressed.



# Searching for the Track You Want to Hear

## Scan Play

You can play back approximately the first 10 seconds of each track on the tape you are listening to one after another.



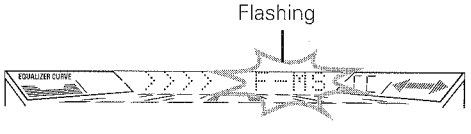

### 1 Select Scan Mode.

Press the F Button to select this mode.
(See Page 35)

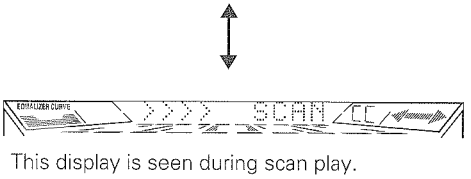
### 2 Turn on Scan.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

When the operation is complete, press the BAND Button to cancel Function Mode.

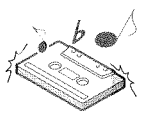



This display is seen during scanning.




This display is seen during scan play.

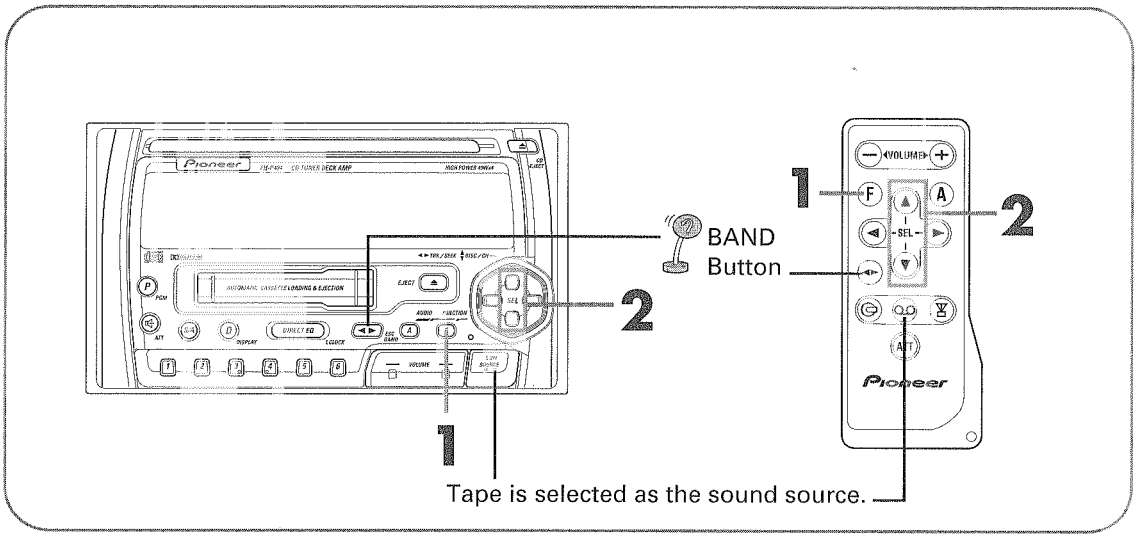
When the track you want hear begins to play, press the BAND Button to cancel Scan.



# Automatic Fast Forward Over Long Blank Sections of a Tape



You can set the tape deck so that it automatically fast forwards to the beginning of the next track if there is a gap with no sound of 12 seconds or more.

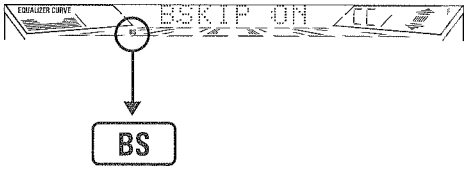



## 1 Select Blank Skip Mode.

Press the F Button to select this mode.
(See Page 35)

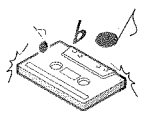
## 2 Turn on Blank Skip.

Press the ▲ Button. (Press the ▼ Button to turn it off.)




This is displayed when Blank Skip is on.

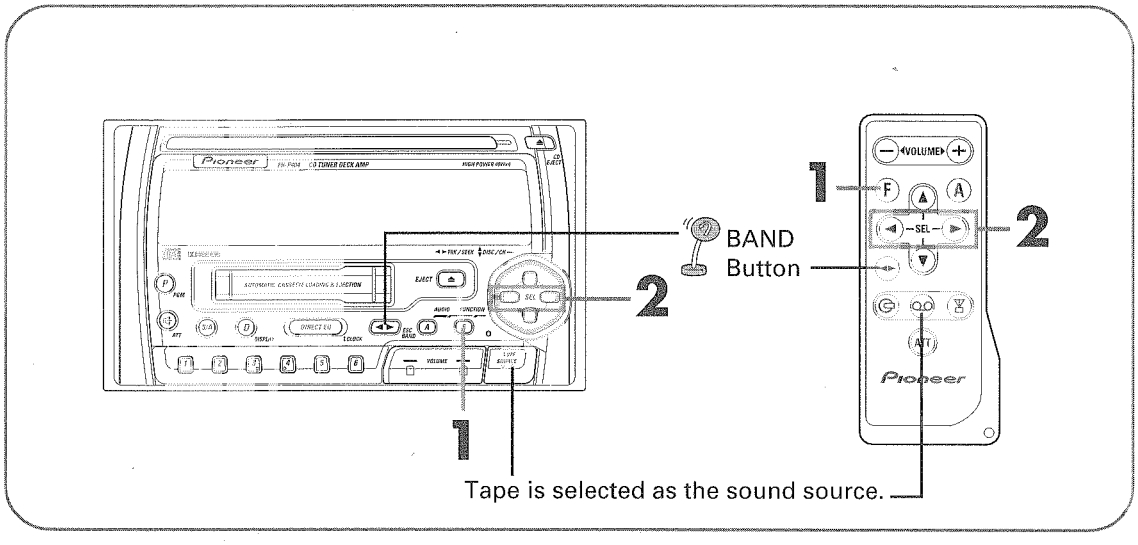
When the operation is complete, press the BAND Button to cancel Function Mode.



# Listening to the Radio during Fast Forward or Rewind



You can listen to the radio during fast forward or rewind.

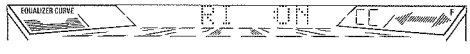



## 1 Select RI mode.

Press the F Button to select this mode.
(See Page 35)

## 2 Turn on RI.

Press the ► Button (Press the ◄ Button to turn it off.)



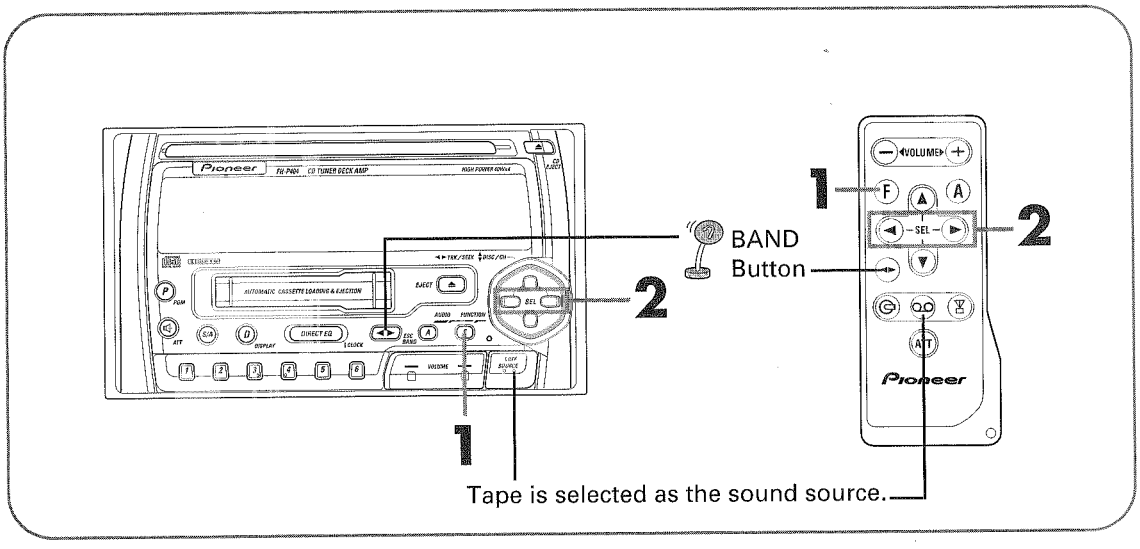
When the operation is complete, press the BAND Button to cancel Function Mode.

- It is impossible to listen to the radio during search.

# Listening to a Tape in Dolby B NR



When listening to a tape recorded by a Dolby B NR system, turn on Dolby B NR.

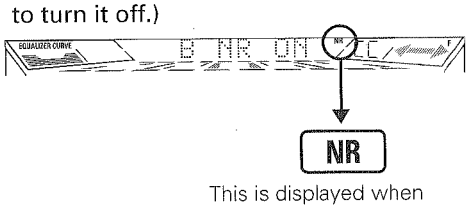



## 1 Select Dolby B NR mode.

Press the F Button to select this mode.
(See Page 35)

## 2 Turn on Dolby B NR.

Press the ► Button (Press the ◄ Button to turn it off.)




This is displayed when Dolby B NR is on.

When the operation is complete, press the BAND Button to cancel Function Mode.

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double D-symbol are trademarks of Dolby Laboratories Licensing Corporation.

- The Dolby NR system is a system for reducing the amount of hiss noise generated during tape playback.

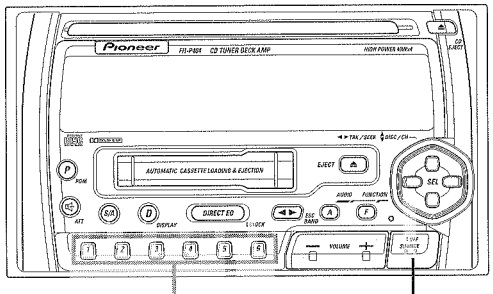
*OPTION*

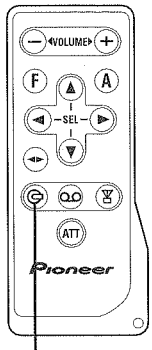
# Selecting the CD You Want to Hear (6/12 Discs)



You can select the CD you want to hear with a single operation.

**This is a 6 continuous/12 continuous play Multi CD Player function.**






1

Multi CD is selected as the sound source.

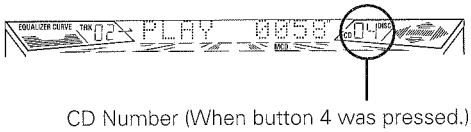
## 1 Select the CD you want to hear.

Press a button from 1 to 6.

Within 2 seconds :To select a CD from 1 to 6

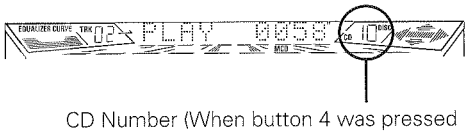
More than 2 seconds :To select a CD from 7 to 12

### In a 6/12 disc case

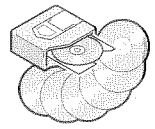



CD Number (When button 4 was pressed.)

### In a 12 disc case




CD Number (When button 4 was pressed more than 2 seconds)



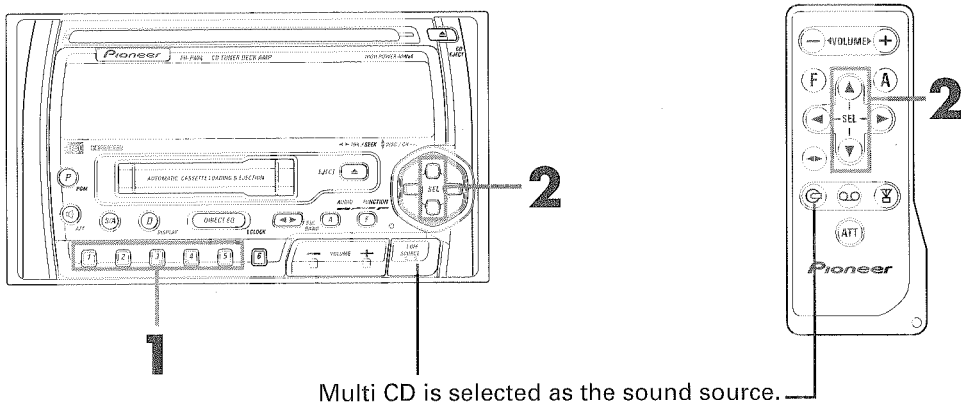
*OPTION*

# Selecting the CD You Want to Hear (50 Discs)

Rough Search

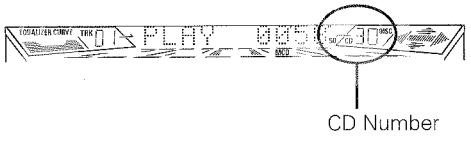
You can select the group of ten CD including the CD you want to hear.

This is a 50 continuous play Multi CD Player function.



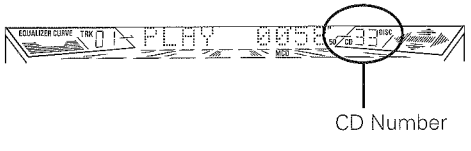

## 1 Roughly select the CD you want to hear.

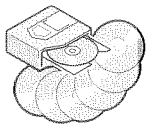
Press a button between 1 and 5.
1: To select a CD between 10 and 19
2: To select a CD between 20 and 29
3: To select a CD between 30 and 39
4: To select a CD between 40 and 49
5: To select CD 50 or 51




## 2 Select the CD you want to hear.

Press the ▲ or ▼ Button.
▲: To select the next CD
▼: To select the previous CD

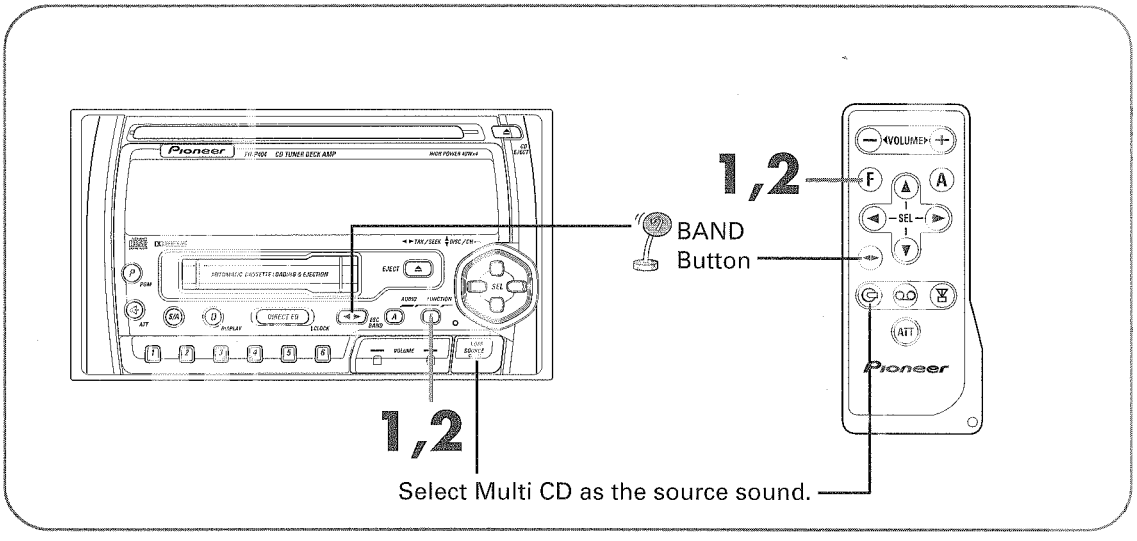




*OPTION*

# Changing Mode

You can switch to this mode to use convenient functions other than the frequently used operations.




## Switching Function Mode

### 1 Switch Function Mode.

Press the F button.
Each time the button is pressed, the mode changes as shown below.

- Repeat Mode (See Page 45)
- Title List Mode (See Page 62)
- "ABC" Disc Title Search Mode (50 Discs) (See Page 63)
- Random Mode (See Page 46)
- Scan Mode (See Page 48)
- ITS Replay Mode (See Page 51)
- Music Group Mode (50 Discs) (See Page 56)
- Play Frequency Mode (50 Discs) (See Page 58)
- Pause Mode (See Page 47)
- COMP Switch Mode (See Page 59)

## Switching to Detailed Setting Mode

### 1 Select Detailed Setting Mode.

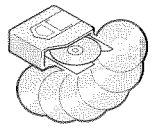
Press the F Button for 2 seconds or more.

### 2 Switch Detailed Setting Modes.

Press the F Button.
Each time the button is pressed, the mode changes as shown below.

- Title Enter Mode (See Page 60)
- ITS Enter Mode (See Page 50)
- Musical Group Enter Mode (50 Discs) (See Page 54)
- Programmable Function Setting Mode (See Page 76)

- To cancel Function Mode, press the BAND Button. (If no operation is performed for 30 seconds, it is canceled automatically.)
- To cancel Detailed Setting Mode, Press the BAND Button.

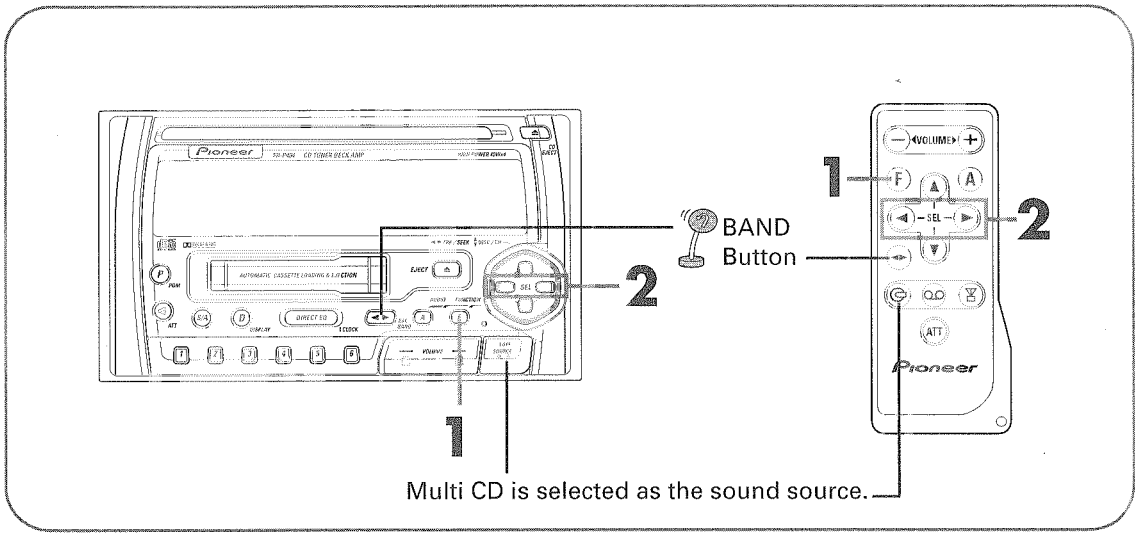


*OPTION*

# Hear the Same Track or CD Again

## Repeat Replay

When you want to hear the track that is now playing again or you want to hear the whole CD again, you can select the range of the repeat replay.

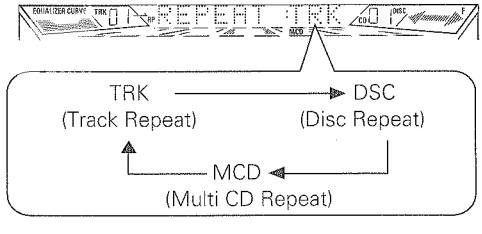



## 1 Select Repeat Mode.

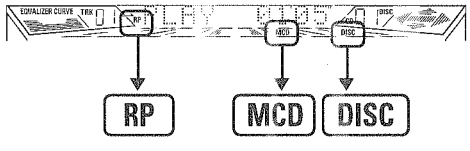
Press F Button to select this mode. (See Page 44)

## 2 Switch the Replay Range

Press the ◄ or ► Button.
Each time the button is pressed, the display changes as shown below.




When the operation is complete, press the BAND Button to cancel Function Mode.




Normally, multi CD Repeat Play ("**MCD**" is lit) is set. During Track Repeat Replay, "**RP**" is lit. During Disc Repeat Replay, "**DISC**" is lit.

### Replay Range

Replay Range (Range of Repeated Playback) lets you select one of the three repeat operations.

| Replay Range | Music Replayed Repeatedly |
|---|---|
| Track Repeat | :The track you are listening to is played back repeatedly. |
| Disk Repeat | :The CD you are listening to is played back repeatedly. |
| Multi CD Repeat | :All the CDs in the Multi CD unit connected to the main unit are replayed. (This is the normal mode.) |

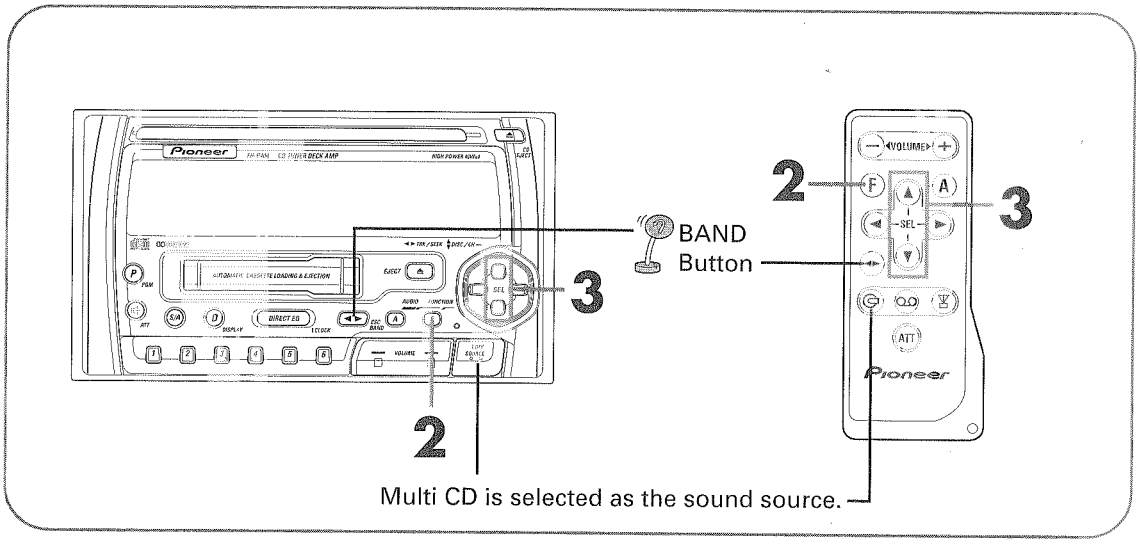
- When two or more Multi CD units are connected to the main unit, Multi CD Repeat is followed by All Repeat (ALL). Select All Repeat to play all the CD in all the connected Multi CD units.

*OPTION*

# Listening to Tracks Out of Order

## Random Replay

You can play the tracks on a CD in a random order by allowing the Multi CD to set the replay sequence.




### 1 Select the Replay Range in Repeat Mode.

Perform steps 1 and 2 on Page 45.
Random replay within the selected range is performed.

### 2 Select Random Mode.

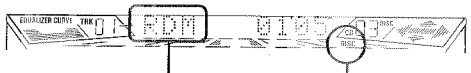
Press the F Button to select this mode.
(See Page 44)

### 3 Turn on Random Replay.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

Random replay begins with the next track.

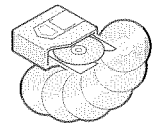
When the operation is complete, press the BAND Button to cancel Function Mode.




Display during Random Replay.

DISC

Displays the selected Replay Range.

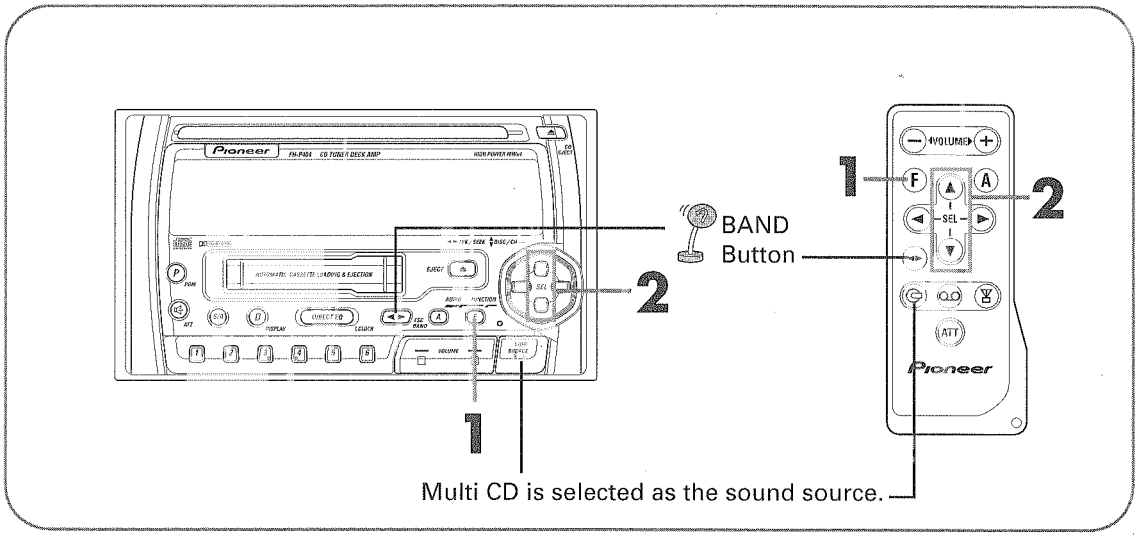


*OPTION*

# Temporarily Stopping CD Replay

Pause

You can temporarily stop CD replay.




## 1 Select Pause Mode.

Select the F Button to select this mode.
(See Page 44)

## 2 Temporarily stop CD replay.

Press the ▲ Button. (Press the ▼ Button to resume replay.)

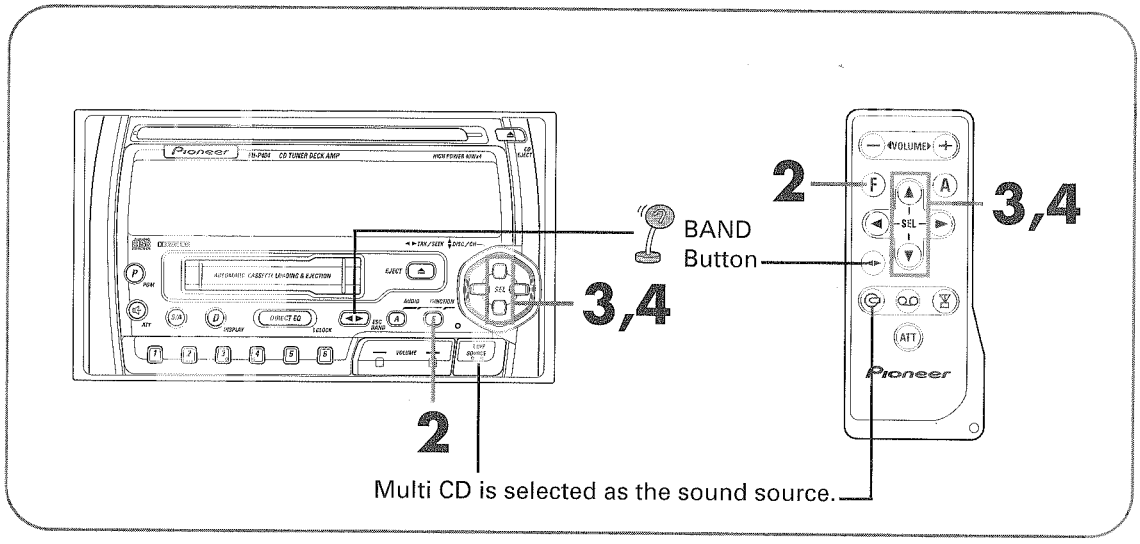
When the operation is complete, press the BAND Button to cancel Function Mode.

Displayed while the CD is temporarily stopped.

*OPTION*

# Searching for a Track or CD You Want to Hear

You can listen to approximately the first 10 seconds of each track on the CD you are listening to one after another. And you can listen to the first part of the first track on each CD one after another.




## 1 Select the Replay Range in Repeat Mode (See Page 45)

### ■ To search for a track you want to hear

Switch Disk Repeat as the Replay Range. You can consecutively replay approximately the first 10 seconds of every track on the CD you are listening to. (Track Scan Replay)

### ■ To search for a CD you want to hear

Switch the Replay Range to Multi CD Repeat. You can consecutively replay approximately the first 10 seconds of the first track on every CD on your Multi CD unit. (Disc Scan Replay)

## 2 Select Scan Mode.

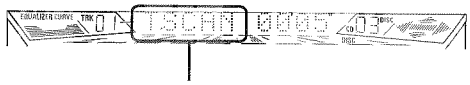
Press the F Button to select this mode.
(See page 44)

## 3 Begin Scan Replay.

Press the ▲ Button.

The first 10 seconds of every track are replayed one after another.

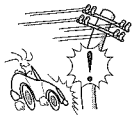
About 30 seconds after scan replay begins, Function Mode is automatically canceled.




This is displayed during Track Scan Replay. During Disc Scan Replay, "D.SCAN" is displayed.

## 4 Cancel Scan Replay when you hear the track (CD) you want to listen to.

Precaution



- If the Function Mode is canceled, select Scan Mode again with step 2, then cancel Scan Replay.

Press the ▼ Button During Scan Mode.

When the operation is complete, press the BAND Button to cancel Function Mode.

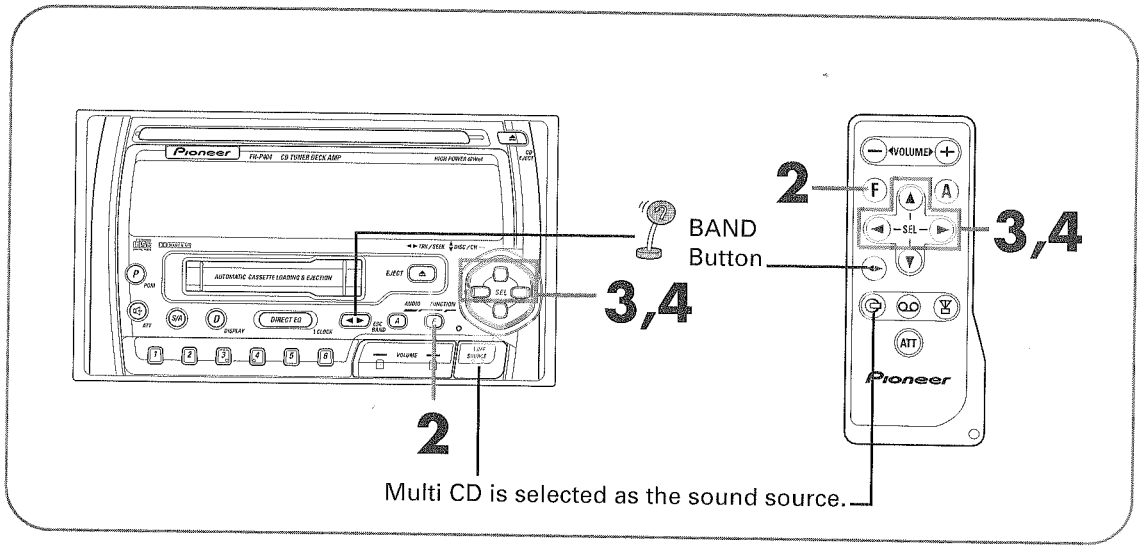
- Scan Replay is canceled when the scan returns to the track (or CD) where scan replay began.
- When two or more Multi CD are connected to the main unit, you can start Scan Replay by selecting All Repeat with step 1. In this case, only the first track on each CD set in all the connected Multi CD units plays.

*OPTION*

# Presenting the Tracks You Want to Hear



In order to replay only preset tracks (See Page 51), you preset the tracks you want to hear in the Multi CD in advance.




## 1 Replay the CD you want to preset. (See Page 20)

**ITS**

ITS means Instant Track Selection. ITS is a function that lets you preset and replay only the tracks you want to hear (See Page 51).

- Track presetting is done for each CD. When a CD is removed and replaced by another, the presetting for that CD is not cleared.
- Up to 24 tracks can be preset for each CD. (If a CD has more than 25 tracks, it is impossible to preset any more than 24 of its tracks.)
- ITS can be used to preset up to 100 CD categorized by title (See Page 60) and group (See Page 54).
- If a CD is preset when 100 CD are already preset, a CD that has not been played since it was preset is cleared beginning with the earliest one preset in order to preset the new CD.
- When two or more Multi CD are connected to the main unit, the number of CD that can be preset does not increase.

## 2 Switch to ITS Enter Mode.

After pressing the F Button for more than 2 seconds, Press the F Button to select this mode. (See Page 44)

## 3 Select the Track you want to preset. (See Page 20)

## 4 Preset the track.

Press the ▲ Button.

This is displayed for about 2 seconds to indicate that it has been preset. Repeat steps 3 to 4 as many times as necessary.

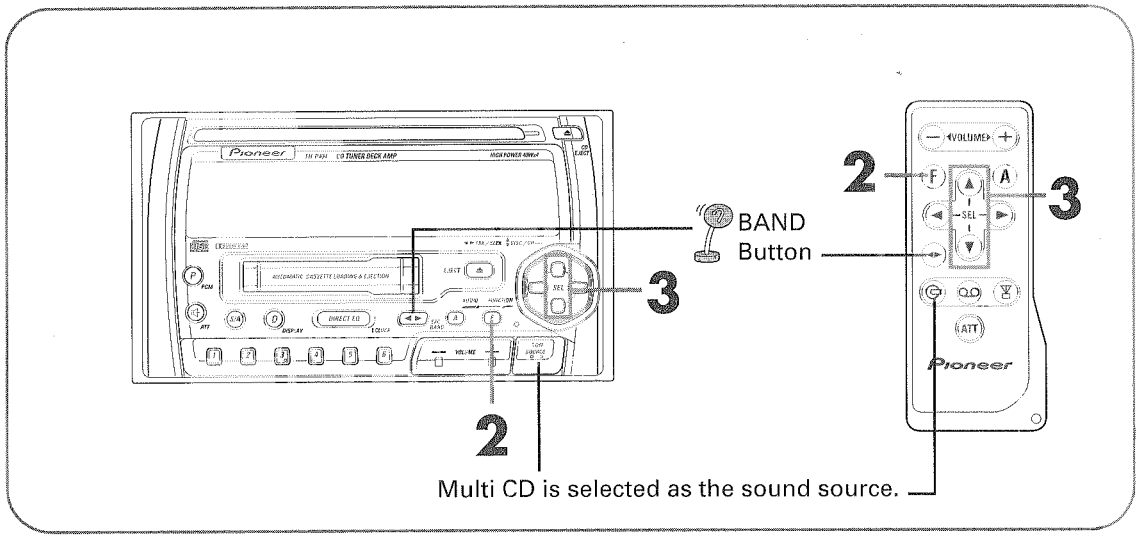
When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.

*OPTION*

# Replaying Only Preset Tracks

ITS Replay

You can replay only the CD tracks you preset using the ITS Presetting Function (See Page 50).




## 1 Select the Replay Range in Repeat Mode.

Perform steps 1 and 2 on Page 45.
ITS Replay in the selected range begins.

## 2 Select ITS Replay Mode.

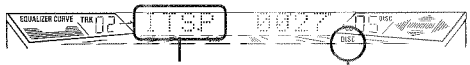
Press the F Button to select this mode.
(See Page 44)

## 3 Turn on ITS Replay.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

ITS Replay begins and only the preset tracks are played.

When the operation is complete, press the BAND Button to cancel Function Mode.



This is displayed during ITS Replay.

DISC

The selected replay range is displayed.

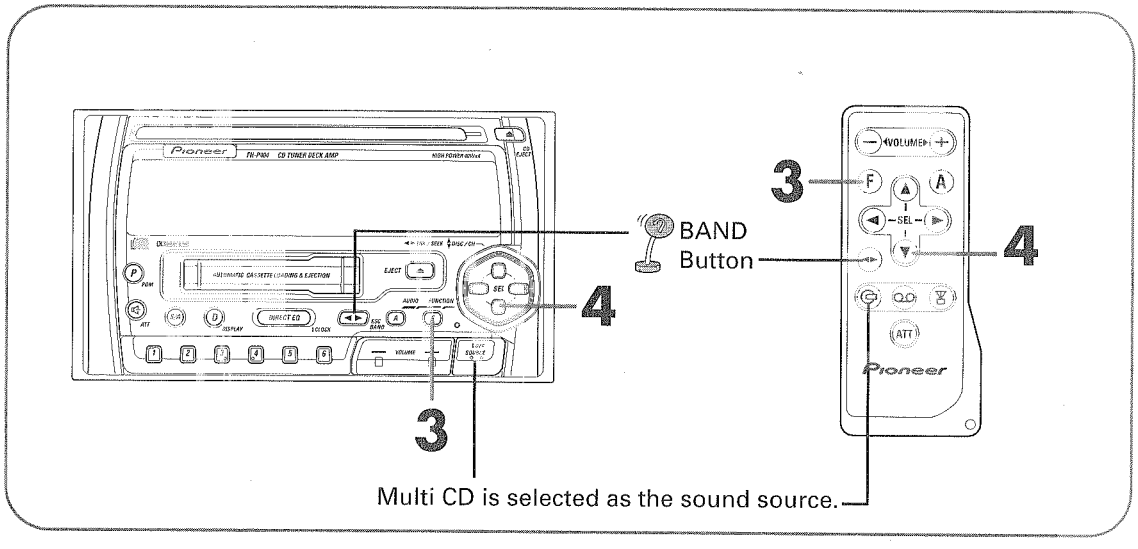
- When no tracks have been preset in the Replay Range selected in step 1, "ITS EMPTY" is displayed for about 2 seconds and ITS Replay is not performed.

OPTION

# Clearing Track Presetting One Track at a Time

ITS Clearing (Single Track)

You can clear track presetting one track at a time.




## 1 Turn on ITS Replay.

(See Page 51)

## 2 Play the track whose presetting you want to clear.

(See Page 20)

## 3 Select ITS Enter Mode.

After pressing the F Button for more than 2 seconds, Press the F Button to select this mode.

(See Page 44)

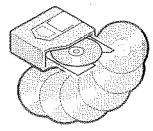
## 4 Clear the track.

Press the ▼ Button.

The track presetting for the track being replayed is cleared and the next preset track begins to play.

When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.

- When no tracks have been preset in the present Replay Range, "ITS EMPTY" is displayed for about 2 seconds, and ITS Replay shuts off automatically.

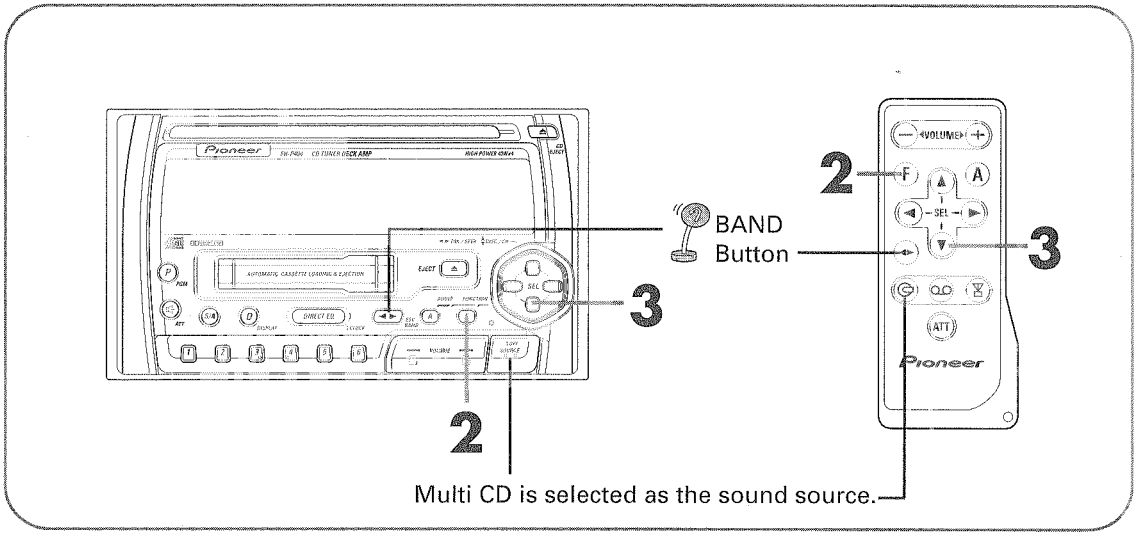


*OPTION*

# Clearing All Track Presettings for a CD

ITS Clear (All CD Tracks)

You can clear all track presettings for a CD.




## 1 Replay the CD whose track presettings you want to clear. (See Page 20)

When ITS Replay is on, turn off ITS Replay.

## 2 Select ITS Enter Mode.

After pressing the F Button for more than 2 seconds, Press the F Button to select this mode. (See Page 44)

## 3 Clear the presettings.

Press the ▼ Button.

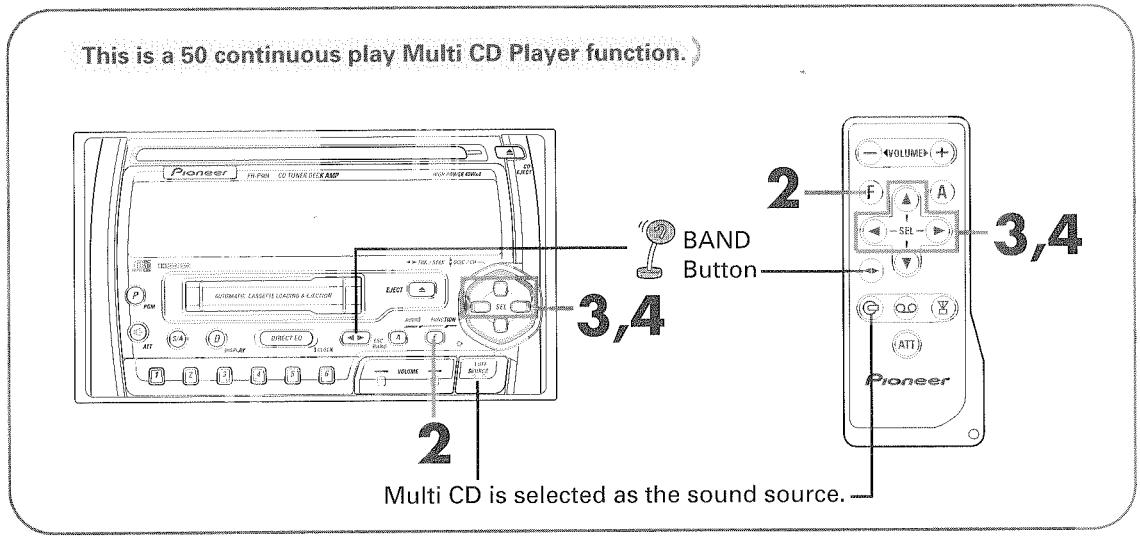
This is displayed for about 2 seconds to indicate that the presettings have been cleared.

When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.

*OPTION*

# Forming CD Groups (50 Discs)

You can form groups (groups by musical genre) of CD in advance in order to play only the CD in a group you want to hear (see Page 56).




## 1 Replay the CD you want to preset in a group. (See Page 20)

## 2 Select Music Group Enter Mode.

After pressing the F Button for more than 2 seconds, Press the F Button to select this mode. (See Page 44)

## 3 Select a group.

Press the ◄ or the ► Button.

Selected group name flashes.

- The following groups are available.

ROCK 1 ROCK 2 POPS 1 POPS 2
JAZZ FUSION CLASSIC GROUP 1
GROUP 2 GROUP 3

## 4 Preset the CD.

Press the ▲ Button.

The flashing stops to indicate that the presetting has been performed.

When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.

### Grouping

Grouping is a function that lets you preset CD that you want to hear in groups and replay only that group (See Page 56).

- Presetting is done by CD. A CD remains preset even if it is removed from the player.
- A total of 100 CD can be grouped either by title (See Page 60) or by ITS (See Page 50).
- If a CD is preset when 100 CD are already preset, the presetting of a CD that has not been played since it was preset is cleared beginning with the earliest one preset in order to preset the new CD.
- When two or more Multi CD are connected to the main unit, the number of CD that can be preset does not increase.

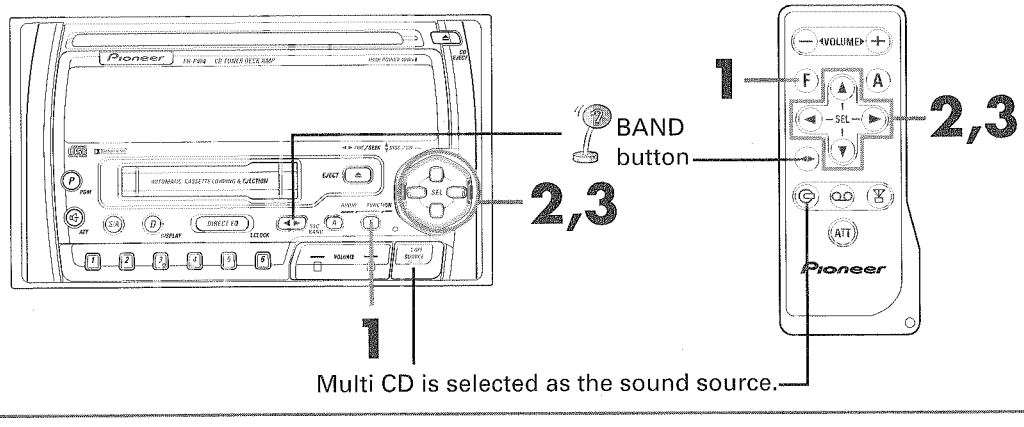
*OPTION*

# Replaying a Group (50 Discs)

Music Group Replay

You can replay only the CDs preset to a particular group (see Page 54).

**This is a 50 continuous play Multi CD Player function.**

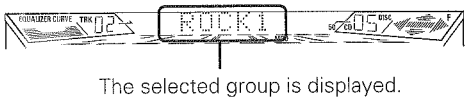



## 1 Select Music Group Mode.

Press the F Button to select this mode.
(See Page 44)

## 2 Select the group you want to hear.

Press the ◄ or the ► Button.




The selected group is displayed.

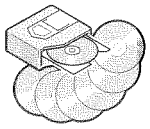
## 3 Turn on Group Replay.

Press the ▲ Button. (Press the ▼ to turn it off.)

Group Replay starts with only CD preset to the group replayed.

When the operation is complete, press the BAND Button to cancel Function Mode.

- If there are no CDs preset to the group selected by step 2, "MG EMPTY" is displayed for about 2 seconds and Music Group Replay is not performed.



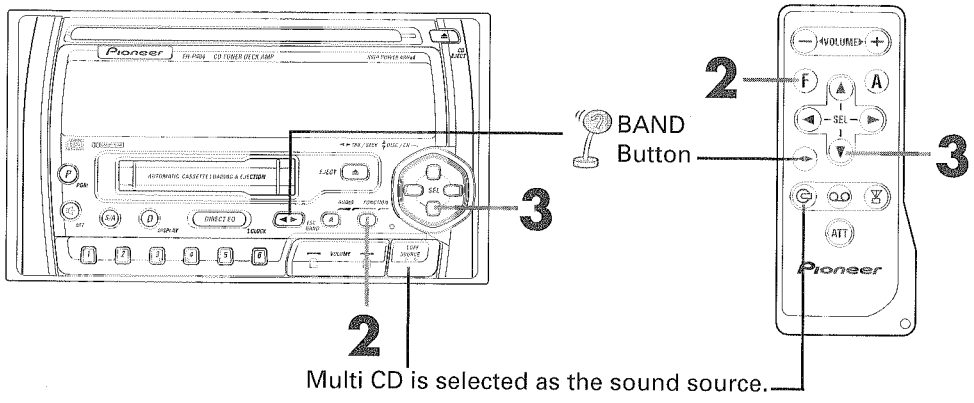
*OPTION*

# Clearing a CD from a Group (50 Discs)

**Music Group Clear**

You can clear a CD preset to a group from that group.

**This is a 50 continuous play Multi CD Player function.**




## 1 Play the CD whose group presetting you want to clear. (See Page 20)

## 2 Select Music Group Enter Mode.

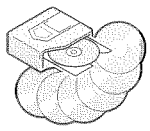
After pressing the F Button for more than 2 seconds, Press the F Button to select this mode. (See Page 44)

## 3 Clear the presetting.

Press the ▼ Button.

This is displayed for about 2 seconds to indicate that the CD presetting has been cleared.

When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.



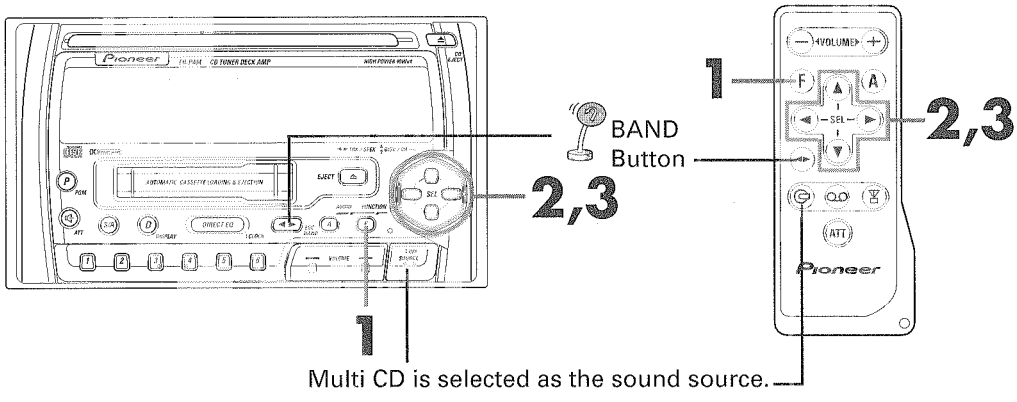
*OPTION*

# Replay CDs by Play Frequency (50 Discs)



You can play the CDs you hear almost every day and the CDs you don't hear very often in frequency sequence.

**This is a 50 continuous play Multi CD Player function.**

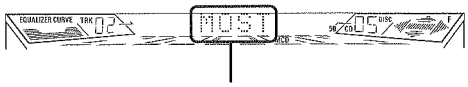



## 1 Select Play Frequency Mode.

Press the F Button to select this mode.
(See Page 44)

## 2 Select the frequency.

Press the ◄ or ► button.
►: To select MOST (the most frequently heard CD)
◄: To select LEAST (the least frequently heard CD)



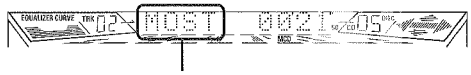
The frequency selected is displayed.

## 3 Turn on Frequency Replay.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

Play Frequency Replay starts and the CDs replay in the frequency sequence.

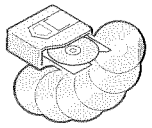
When the operation is complete, press the BAND Button to cancel Function Mode.



This is displayed during Play Frequency Replay.

### Play Frequency Replay

Play Frequency Replay is the function that allows you to replay all the CDs in the magazine in a sequence based on play frequency: either beginning with the ones you play most often (MOST) or beginning with the ones you play least often (LEAST).



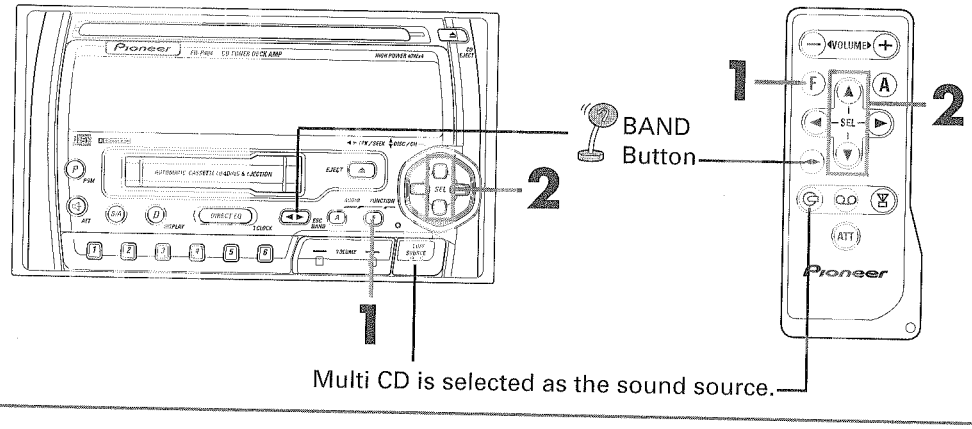
*OPTION*

# Adjusting CD Sound Quality

## Compression/DBE

You can reduce the volume difference between the highest and lowest sounds or boost the bass range.

**This can be done using a Multi CD equipped with the Compression/DBE functions (CDX-P620S, etc.).**




## 1 Select the COMP Switching Mode.

Press the F Button to select this mode.
(See Page 44)
The display presents the present status of Compression/DBE.

## 2 Select the function.

Press the ▲ or ▼ Button.
Each time the button is pressed, the function changes as shown below.

COMP OFF → COMP 1 → COMP 2
↑ ↓
DBE2 ← DBE1 ← COMP OFF

For both COMP 1 and 2 and DBE 1 and 2, 2 is more effective than 1.

When the operation is complete, press the BAND Button to cancel Function Mode.

**Compression**

Compression lowers the volume of loud sounds and raises the volume of low sounds to reduce the volume difference between the high and low volume sound. This function is convenient when you are listening to a CD whose sound is difficult to hear.

**DBE**

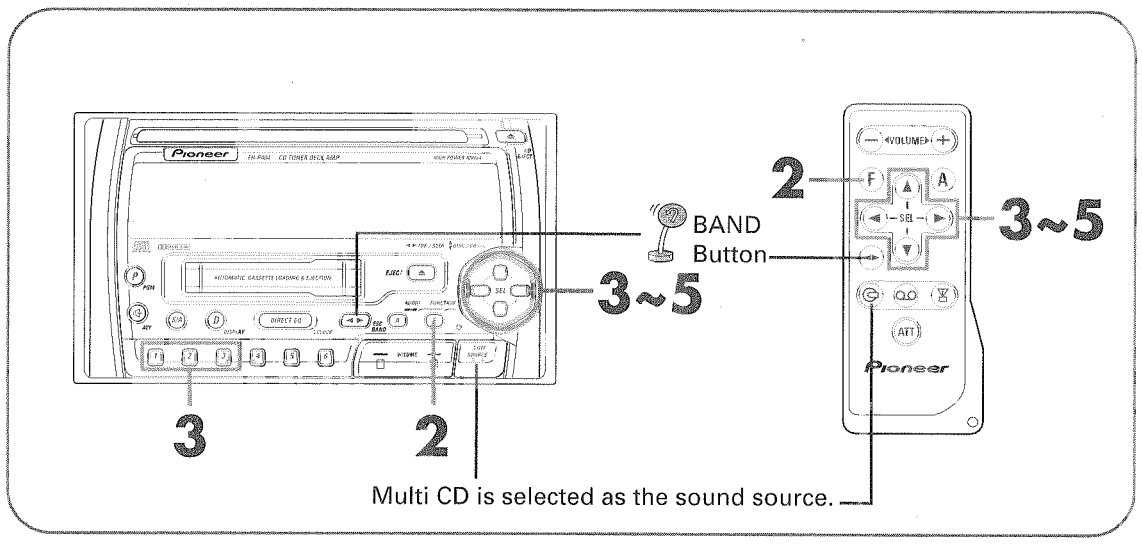
DBE stands for Dynamic Bass Emphasis. DBE is function that boosts the bass range which tends to be insufficient inside a car.

- When the unit is combined with a Multi CD without the Compression/DBE function, "NO COMP" is displayed and the function does not operate.

*OPTION*

# Presetting CD Titles

To display the title of a CD (See Page 64), you preset the title in advance.




## 1 Replay the CD whose title you want to enter.

(See Page 20)

## 2 Select Title Enter Mode

Press the F Button for more than 2 seconds. (See Page 44)

Displayed for about 2 seconds.

## 3 Enter the title.

### ■ When selecting the letters to be entered

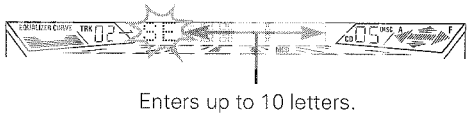
Press the ▲ or ▼ Button.
▲: To select the next letter
▼: To select the previous letter

To change the letter selected, press button 1 or 2.

| Button pressed | : Selected letter |
|---|---|
| Button 1 | : a to z, space (_) |
| Button 1 (Changes each time the button is pressed) | : A to Z, numbers (0 to 9), symbols ( ! " # ¤ % & ' () * + , – . / : ; < = > ? @ [ \ ] – \|\| { \| } ¯ ), space (_) |
| Button 2 | : Number (0 to 9), symbols ( ! " # ¤ % & ' () * + , – . / : ; < = > ? @ [ \ ] – \|\| { \| } ¯ ), space (_) |

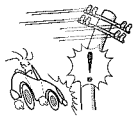
### ■ When selecting the entry location:

Press the ◄ or ► Button.
►: To move it to the right
◄: To move it to the left



Enters up to 10 letters.

Precaution



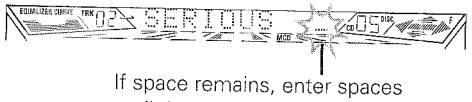
- When CD TEXT is played in a Multi CD that is compatible with CD TEXT, Title Enter Mode can not be selected. (It is impossible to change the CD titles preset in advance in CD TEXT.)

### When you want to stop without completing an operation

Press the BAND Button.

If the BAND Button is pressed during title entry (while a letter is flashing), Title Entry Mode is canceled in the middle of the operation. (In this case, the title you have partly entered is not preset.)

## 4 When entry is completed, the tenth position flashes.




If space remains, enter spaces until the tenth position flashes.

## 5 Preset the entered title.

Press the ► Button.

When the entry location stops flashing, the entered title is preset.

When the operation is complete, press the BAND Button to cancel Detailed Setting Mode.

### CD TEXT

A CD TEXT is a CD with its title, name of the singer, musical number, etc. recorded as alphabet information. Any CD with the symbol shown below on its disc title surface is a CD TEXT. (All CD TEXT type CD bear the following symbol.)

COMPACT disc DIGITAL AUDIO TEXT

### Title Display

Title Display is the function that displays the title of a CD that has been entered and preset.

If titles are attached to your CDs, you can search for the CD you want to hear using Title List (See Page 62) or the "ABC" Disc Title Search (See Page 63).

With a Multi CD compatible with CD TEXT, you can perform Title Display or Title List (See Page 62) just as you do with CD Titles present in CD TEXT.

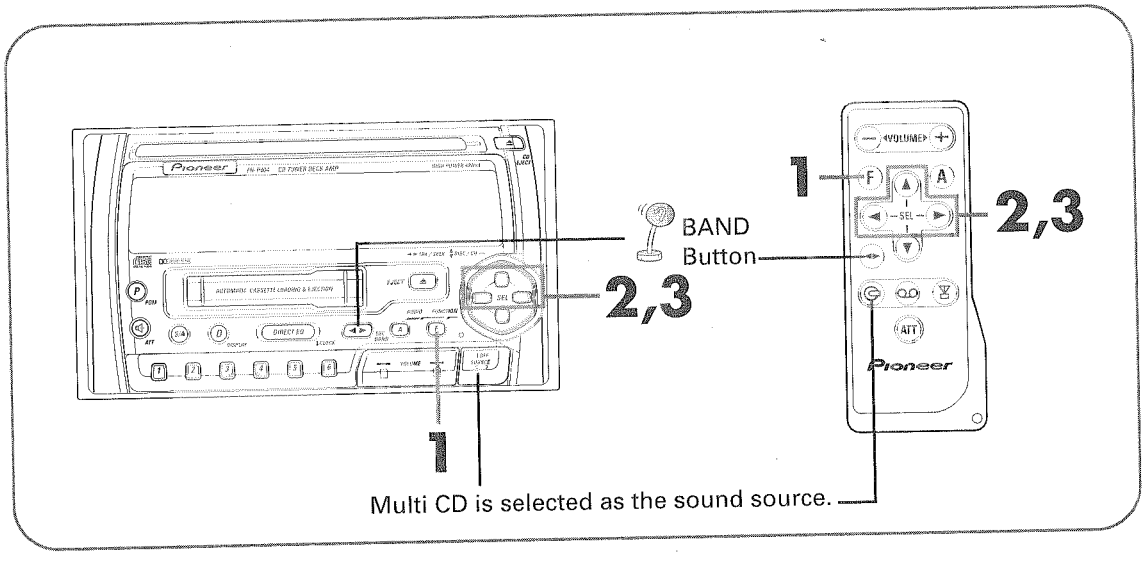
- Titles with up to 10 letters can be entered.
- It is possible to preset Multi CD titles for 100 CDs including ITS (See Page 50) and groups (See Page 54).
- If a CD title is preset when 100 CD titles are already preset, a CD that has not been played since its title was preset is cleared beginning with the earliest one preset in order to preset the new CD title.
- A preset title is not cleared when the CD is ejected. When this CD has been set in the internal CD, its title can be displayed.
- When two or more Multi CD are connected to the main unit, the number of CD titles that can be preset does not increase.

*OPTION*

# Searching for a CD You Want to Hear by Viewing the Titles



You can select the CD you want to hear while viewing the CD titles.




## 1 Select Title List Mode.

Press the F Button to select this mode.
(See Page 44)

Displayed for about 2 seconds.

## 2 Select the CD you want to hear.

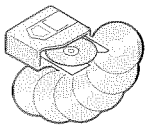
Press the ◄ or ► button.
►: To display the title of the next CD
◄: To display the title of the previous CD

## 3 Play the selected CD.

Press the ▲ Button.

The selected CD plays.

When the operation is complete, press the BAND Button to cancel Function Mode.



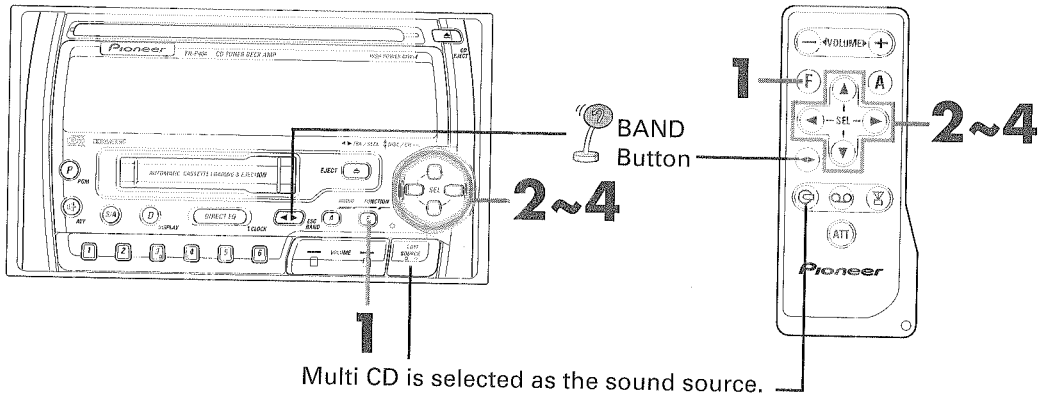
*OPTION*

# Searching For a CD by the First Letter of its Title (50 Discs)

"ABC" Disk Title Search

You can search for a CD by the first letter of its Title.

**This is a 50 continuous play Multi CD function.**




## 1 Select "ABC" Disc Title Search Mode.

Press the F Button to select this mode.
(See Page 44)

Displayed for about 2 seconds.

## 2 Select the first letter of the title.

Press the ▲ or ▼ Button.
▲: To select the next letter
▼: To select the previous letter

## 3 Select the title of the CD you want to hear.

Press the ◄ or ► button.
►: To display the title of the next CD
◄: To display the title of the previous CD

Flashing

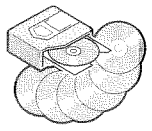
## 4 Play the selected CD.

Press the ▲ Button.

The selected CD plays.

When the operation is complete, press the BAND Button to cancel Function Mode.

- When you wish to cancel the operation in step 3, press the ▼ Button to cancel it and return to step 2.
- When there is no CD with a title beginning with the selected letter, "NO TITLE" is displayed for about 8 seconds.

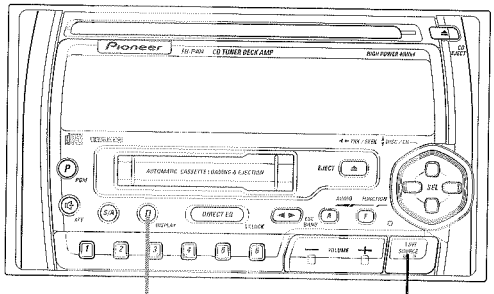


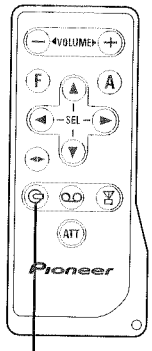
*OPTION*

# Changing the Display



You can display preset CD titles (See Page 60), CD titles in groups (See Page 54), or CD TEXTs.




Multi CD is selected as the sound source.

## 1 Switch the Display.

Place the D Button.
Each time the button is pressed, the display changes as shown below.

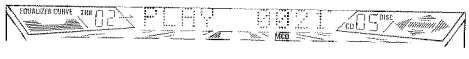
- Elapsed Time Display
- Title Display
- Group Display (50 Discs)

### ■ If a CD TEXT is inserted in a MULTI CD compatible with CD TEXT:

Press the D Button.
Each time the button is pressed, the display changes as shown below.

- Elapsed Time Display
- Title (CD) Display
- Singer Name (CD) Display
- Title (Number) Display
- Singer Name (Number) Display

### Elapsed Time Display



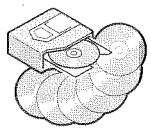
### Title/Singer Name Display

The entered title/title, singer name in the CD TEXT

### Group Display (50 Discs)

Group

- If display is switched when a CD whose title has not been entered, or a CD that has not been assigned to a group is selected, "NO TITLE" or "NO GROUP" is displayed.
- If the title of a CD TEXT equipped CD has more than 10 letters, press the D Button for 2 seconds or more. The hidden letters will be displayed in sequence.



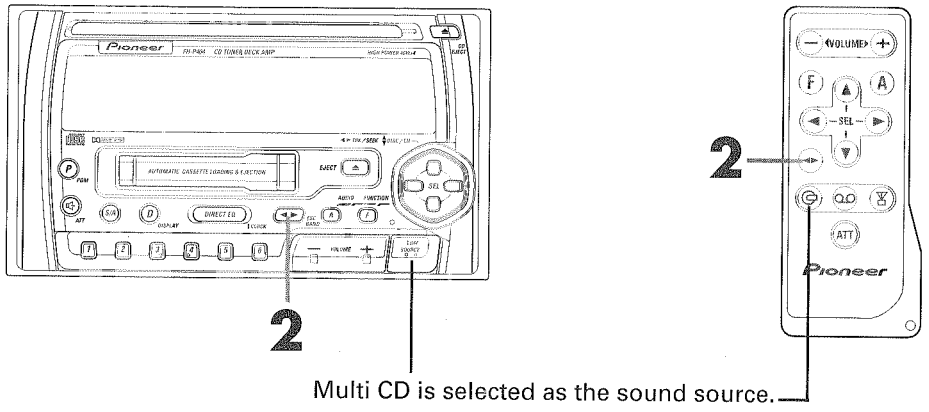
*OPTION*

# Extracting a Selected CD (50 Discs)

CD Extract

You can select and extract a single CD by transferring it from the magazine to the extra tray.

**This is a 50 continuous play Multi CD Player function.**




## 1 Play the CD you want to extract. (See Page 20)

## 2 Move the CD to the extra tray.

Press the BAND Button for more than 2 seconds.

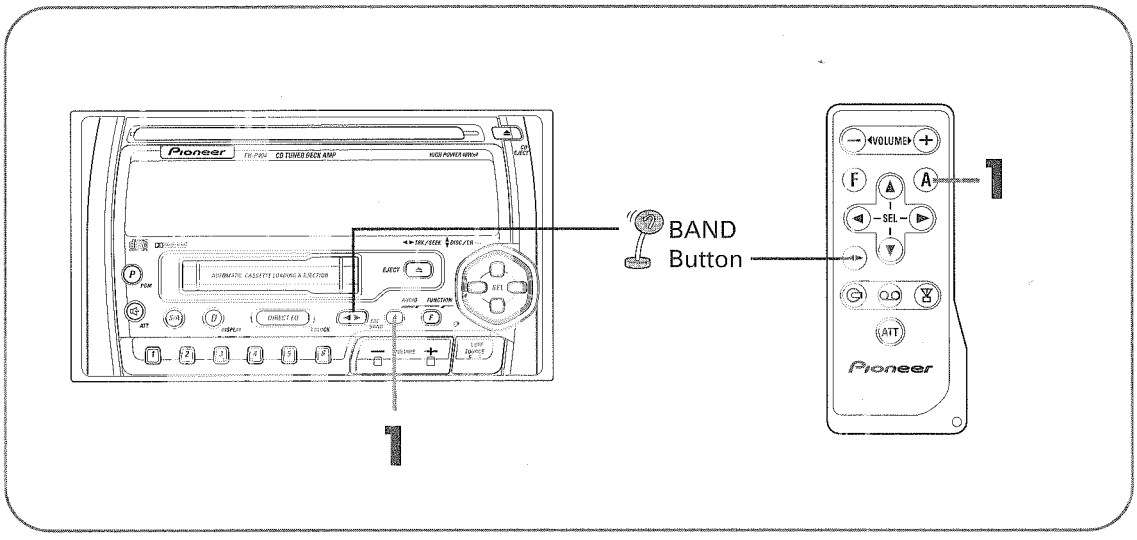
## 3 Take the CD from the extra tray.

See the operating instructions for the 50 continuous play Multi CD Player.

- This function will not operate if there is already a CD in the extra tray.

# Switching to Audio Adjustment Mode

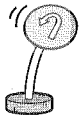
To adjust the sound quality, switch the mode to adjust the audio.




## 1 Switch to Audio Adjustment Mode.

Press the A Button.
Each time the button is pressed, the mode changes as shown below.

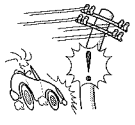
Volume Balance Adjustment Mode
(See Page 67)
↓
Bass Level Adjustment Mode
(See Page 68)
↓
Treble Level Adjustment Mode
(See Page 68)
↓
Loudness Mode (See Page 69)
↓
Sub Woofer Mode (See Page 70)
↓
Sub Woofer Adjustment Mode
(See Page 71)
(Only when Sub Woofer is on)
↓
FIE Mode (See Page 72)
↓
SLA Mode (See Page 73)



### When you want to stop without completing an operation

Press the BAND Button.
This cancels Audio Adjustment Mode. It is also automatically canceled if no adjustment is performed for about 30 seconds.

Precaution

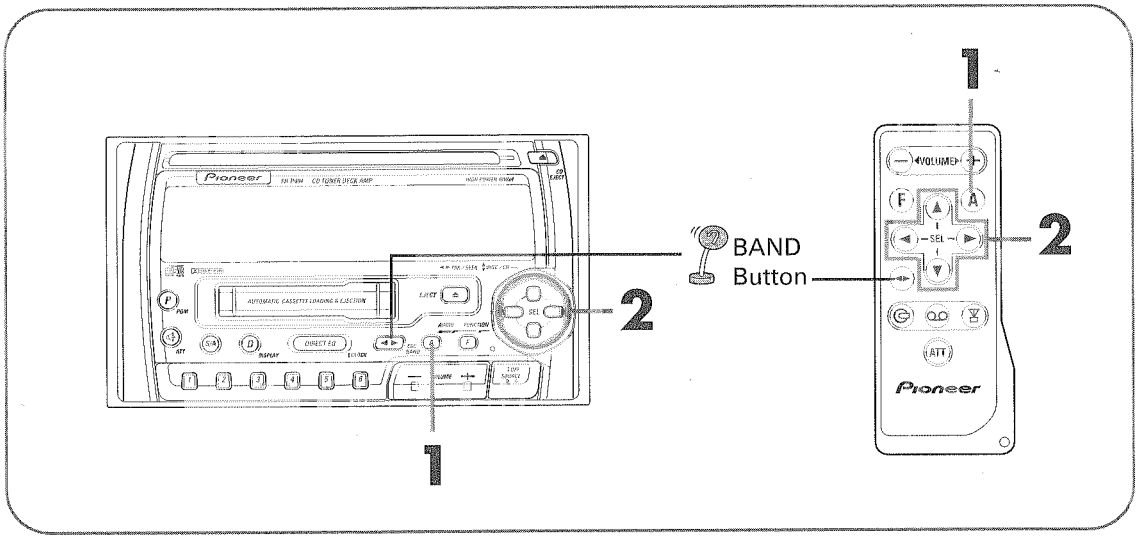


- When the Sub Woofer Function (See Page 70) has been turned off, it is impossible to switch to the Sub Woofer Adjustment Mode.

# Adjustment of the Front/Rear and Left/Right Volume Balance

Fader/Balance

You can adjust the volume balance between the front and rear and between the left and right speakers.



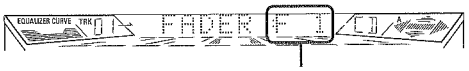

## 1 Select Volume Balance Adjustment Mode.

Press the A Button to select this function. (See Page 66)

## 2 Adjust the volume balance.

### ■ To perform front/rear adjustment

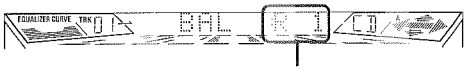
Press ▲ or ▼ Button.
▲: To raise the front volume
▼: To raise the rear volume




The front/rear balance can be adjusted within a range from F15 to R15.

### ■ To perform left/right adjustment

Press ◄ or ► Button.
►: To raise the right volume
◄: To raise the left volume



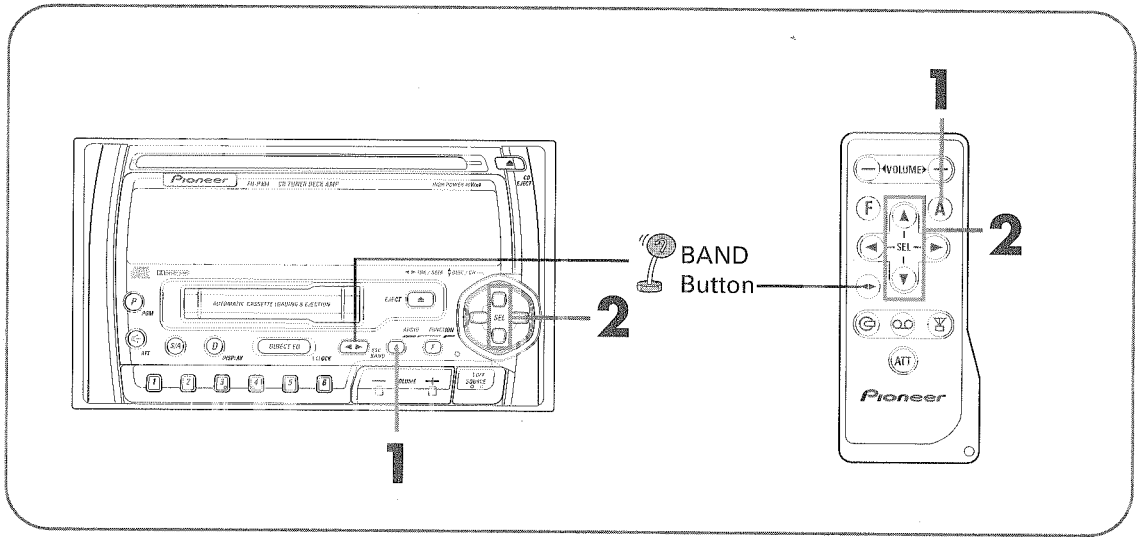

The left/right balance can be adjusted within a range from L9 to R9.

When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

# Adjusting the Treble and Bass Levels



You can adjust the level of the bass and treble for each sound source.



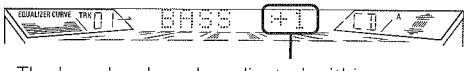

## Adjusting the Bass Level

### 1 Select Bass Level Adjustment Mode.

Press the A Button to select this mode.
(See Page 66)

### 2 Adjust the Bass Level.

Press the ▲ or ▼ Button.
▲: To raise the bass
▼: To lower the bass




The bass level can be adjusted within a range from +6 to –6.

When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

- The bass level can be selected separately for each sound source.
- There is one setting for the internal CD and to Multi CD.

## Adjusting the Treble Level

### 1 Select Treble Level Adjustment Mode.

Press the A Button to select this mode.
(See Page 66)

### 2 Adjust the Treble Level.

Press the ▲ or ▼ Button.
▲: To raise the treble
▼: To lower the treble

The treble level can be adjusted within a range from +6 to –6.

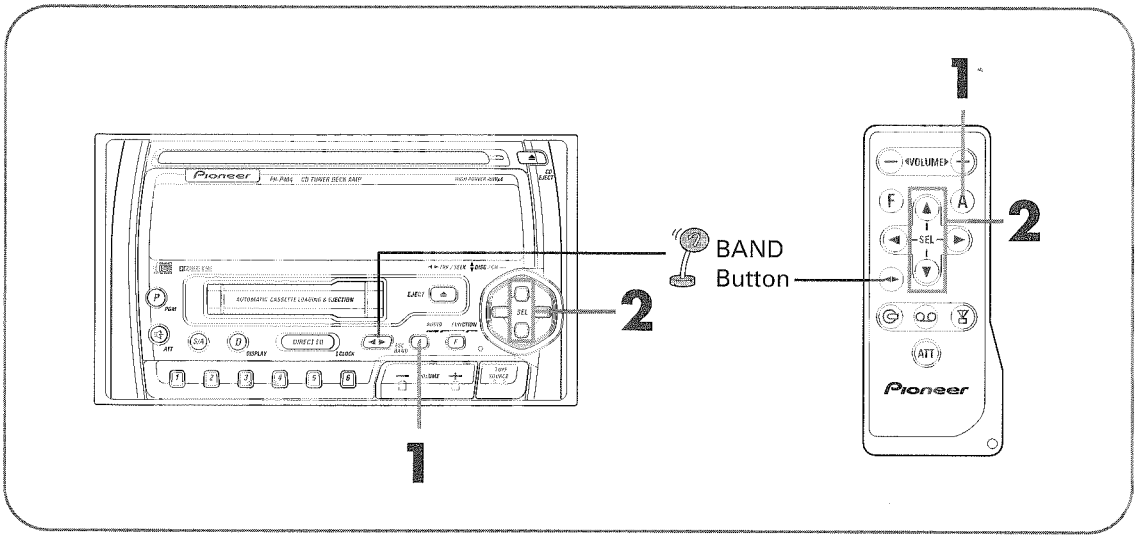
When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

- The treble level can be selected separately for each sound source.
- There is one setting for the internal CD and to Multi CD.

# Adding Modulation to Low Volume Sound

Loudness

To compensate for a feeling that the bass and treble are insufficient while listening to low volume sound, you can modulate the sound.

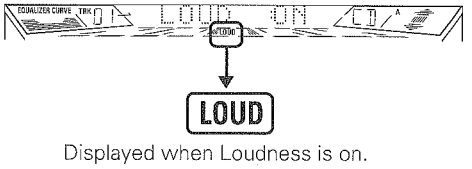



## 1 Select Loudness Mode.

Press the A Button to select this mode.
(See Page 66)

## 2 Turn on Loudness.

Press the ▲ Button. (Press the ▼ Button to turn it off.)




Displayed when Loudness is on.

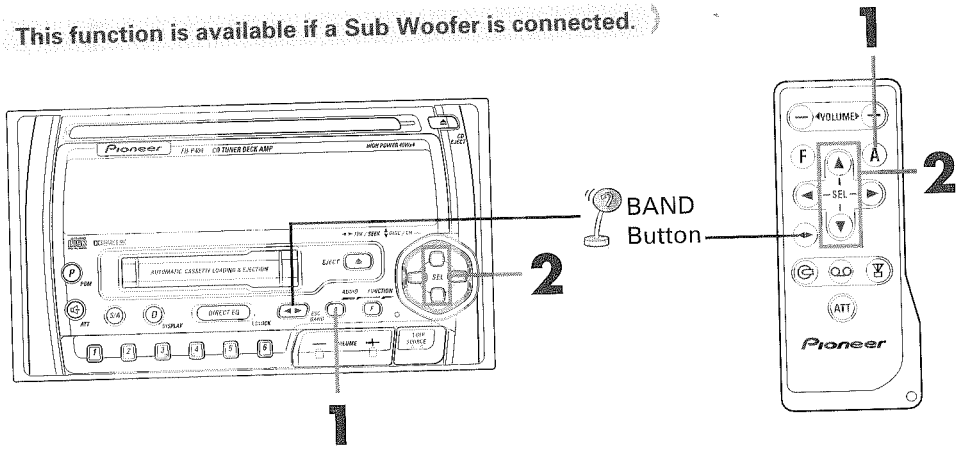
When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

# Using the Sub Woofer



You can turn the Sub Woofer output on or off. (This function is on as an initial setting.)

**This function is available if a Sub Woofer is connected.**

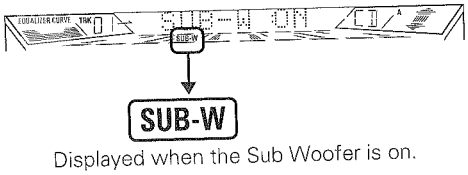



## 1 Select Sub Woofer Mode.

Press the A Button to select this mode.
(See Page 66)

## 2 Turn on the Sub Woofer function.

Press the ▲ Button. (Press the ▼ Button to turn it off.)




Displayed when the Sub Woofer is on.

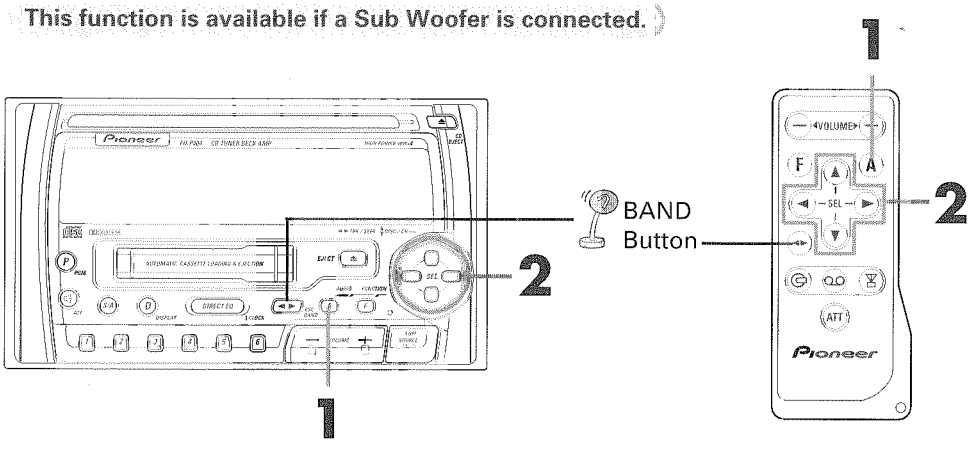
When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

# Adjusting the Sub Woofer

## Sub Woofer Adjustment

You can turn on Sub Woofer output to set the cut-off frequency and output level.

**This function is available if a Sub Woofer is connected.**



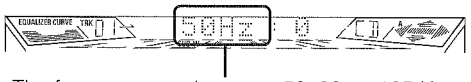

## 1 Select Sub Woofer Adjustment Mode.

Press the A Button to select this mode.
(See Page 66)

## 2 Adjust the Frequency and Level.

### ■ To adjust the frequency

Press the ◄ or ► Button
►: To select a higher frequency
◄: To select a lower frequency

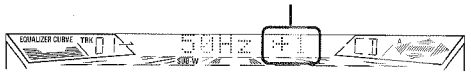


The frequency can be set at 50, 80, or 125 Hz.

### ■ To adjust the level

Press the ▲ or ▼ Button
▲: To increase the level
▼: To reduce the level

The level can be adjusted from –6 to +6.



When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

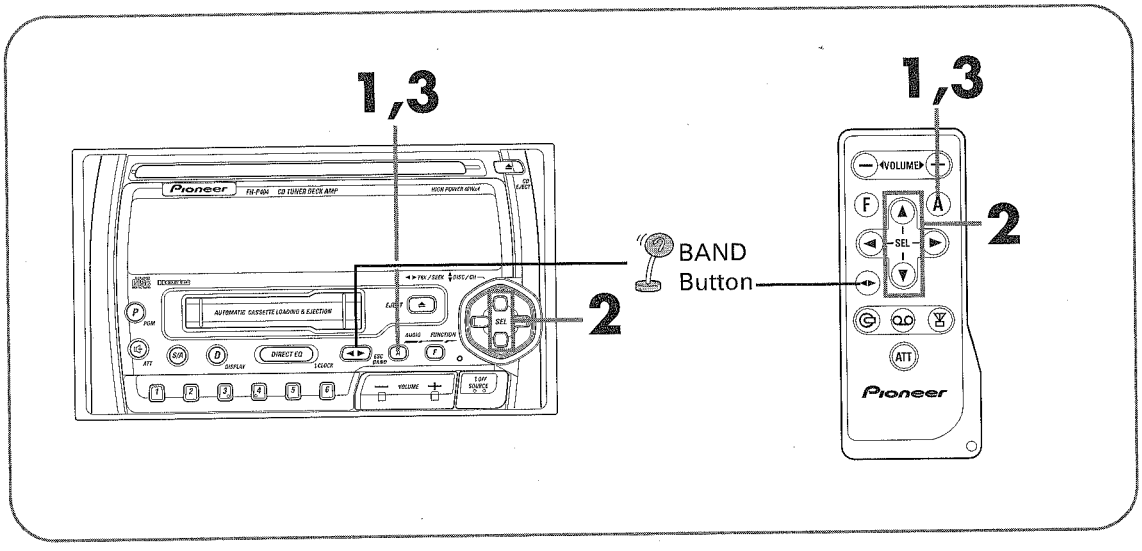
**Cut-off Frequency**

The sound range below the frequency selected from 50, 80, or 125 Hz is output from the Sub Woofer.

# Modulating the Front/Rear Sound Quality

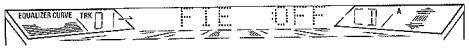
FIE

You can hear the sound from the front speakers simply by lowering that from the rear speakers.



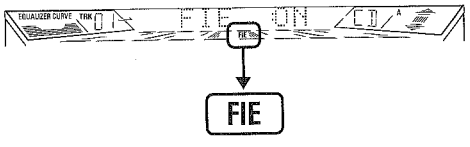

## 1 Select FIE Mode.

Press the A Button to select this mode.
(See Page 66)




## 2 Turn FIE Mode on.

Press the ▲ Button. (Press the ▼ Button to turn it off.)



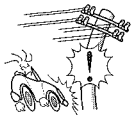

Displayed while FIE is on.

## 3 Adjust the front/rear volume balance.

Press the A Button to select Volume Balance Adjustment Mode, and adjust the front/rear volume balance.
(See Page 67)

When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

Precaution



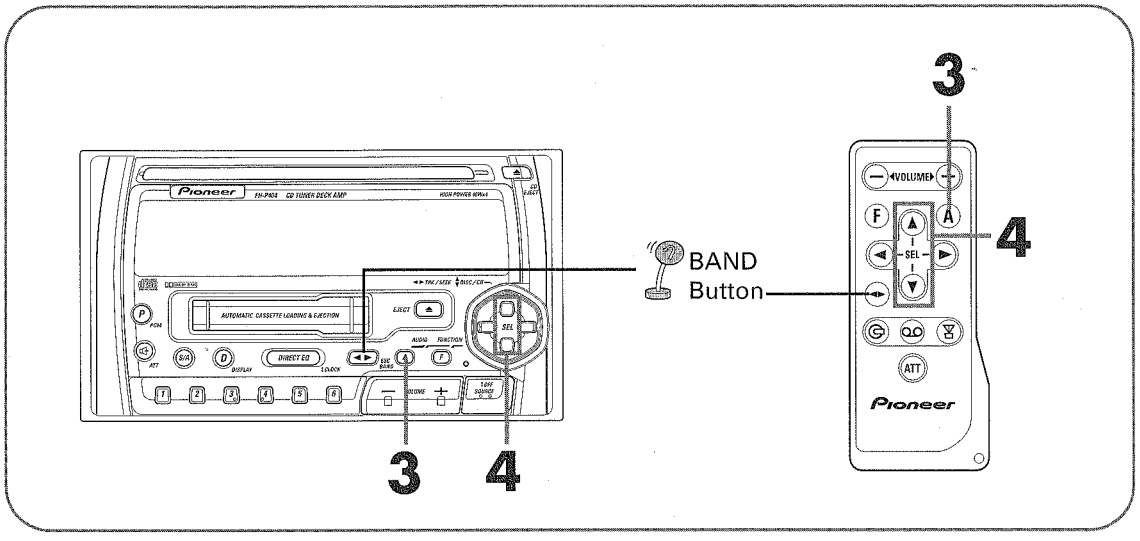
- Turn FIE off while the volume is low. When FIE is turned off, sounds other than bass sounds are output by the rear speakers, abruptly increasing the volume.

- FIE stands for Front Image Enhancer.
- Leave FIE off if you have a two speaker system.

# Equalizing the Volume of all Sound Sources

SLA

To prevent the volume from changing when you switch from one sound source to another, you can equalize all source volumes at the FM volume.

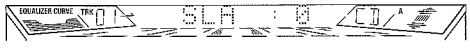



## 1 Turn on the FM receiver and check the FM volume. (See Page 19)

## 2 Select the sound source you want to adjust. (See Page 16)

## 3 Select SLA Mode.

Press the A Button to select this mode.
(See Page 66)




## 4 Adjust the level.

Press the ▲ or ▼ Button.
▲: To raise the level
▼: To lower the level

The level can be adjusted from –4 to +4.

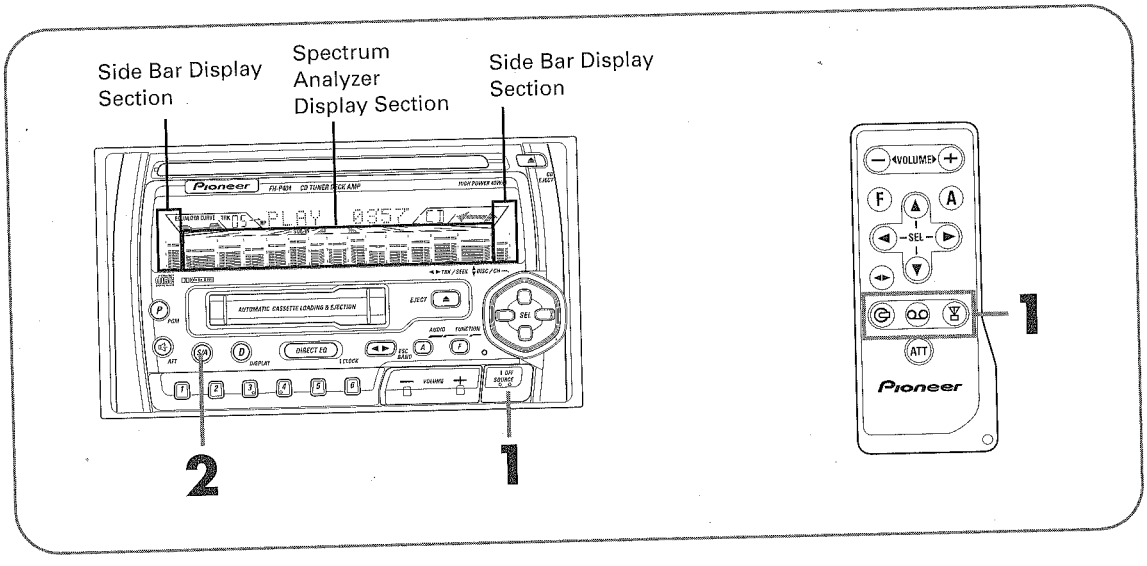
When the operation is complete, press the BAND Button to cancel Audio Adjustment Mode.

- SLA stands for Source Level Adjuster.
- Because SLA is used to adjust differences in the volume of other sources with the FM volume as the standard, it is impossible to select SLA Mode while listening to an FM broadcast.
- It is possible to adjust differences in the volume of CD, AM, tape, and AUX (auxiliary components) separately. The levels of the internal CD and Multi CD are identical.

# Switching Between Spectrum Analyzer Display and Side Bar Display



You can enjoy seven kinds of Spectrum Analyzer displays and three kinds of side bar displays while listening to each sound source.




## Switching to Spectrum Analyzer Display

### 1 Select the sound source you want to hear.

Press the SOURCE Button. (See Page 16)
The speakers produce sound.

### 2 Switch to Spectrum Analyzer Display.

Press the S/A Button (less than 2 seconds).
Each time you press the button, mode 1 to 7 Spectrum Analyzer displays appear as shown below.

| Mode | Type |
|---|---|
| 1 | Peak Bound |
| 2 | Symmetry |
| 3 | Symmetry (Reverse) |
| 4 | Water Fall |
| 5 | Peak Rally |
| 6 | Fireworks |
| 7 | Equalizer Curve |

Choose the one you prefer.

## Switching to Side Bar Display

### 1 Select the sound source you want to hear.

Press the SOURCE Button. (See Page 16)
The speakers produce sound.

### 2 Switch to Side Bar Display.

Press the S/A Button (more than 2 seconds).
Each time you press the button, the display changes as shown below.

Running Indicator
The indicator is lit from bottom to top.

Fully Illuminated
The entire indicator (side bar) is illuminated.

Linked to Spectrum Analyzer
It is illuminated along with the Spectrum Analyzer display that is selected.

- A side bar displays the volume for about 4 seconds after the volume has been adjusted.

## Spectrum Analyzer Display Examples

### MODE1

Peak Bound

### MODE2

Symmetry

### MODE3

Symmetry (Reversed)

### MODE4

Waterfall

### MODE5

Peak Rally

### MODE6

Fireworks
Side bar display is temporarily linked with Spectrum Analyzer.

### MODE7

Equalizer Curve
The equalizer curve that is set is displayed.

#### BASS

#### HEAVY BASS

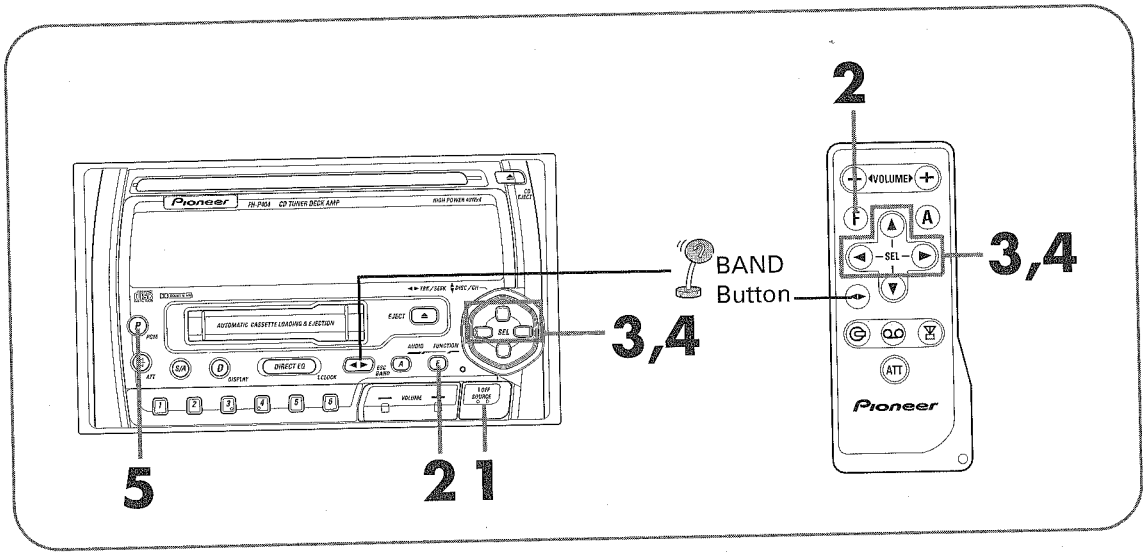
#### VOCAL

#### FLAT

# Programming Frequently Used Functions



You can program functions you use frequently for each source using the PGM Buttons on the main unit. Programmed functions permit you to operate the unit without selecting the mode.




## 1 Select a source.

Press the SOURCE Button. (See Page 16)

## 2 Select Programmable Function Setting Mode.

Press the F Button for 2 seconds or more.
(When the source is internal CD or Multi CD, pressing the F Button switches to Programmable Function Setting Mode.)

## 3 Select the function you want to program.

Press the ◄ or ► Button.
Each time the button is pressed, the mode changes as shown below. The sequence varies according to the selected sound source.

Internal CD Case
PAUSE → REPEAT → RANDOM

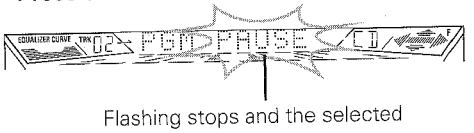
Tape Case
NR → B.SKIP → REPEAT

Multi CD Case
PAUSE → REPEAT → RANDOM
ITS ← LIST

Radio Case
BSM
LOCAL

## 4 Program the selected function.

Press the ▲ Button.




Flashing stops and the selected function is programmed.

When the operation is complete, press the BAND Button to cancel Programmable Function Setting Mode.

## 5 Operate the programmed function.

Press the PGM Button or press the PGM Button for more than 2 seconds.

Depending on which function has been programmed, the programmed function is operated as shown on the following table.

This table shows the functions that can be programmed for each sound source mode. Refer to this table to operate programmed functions.

| Source | Programmed function | Pressing PGM button | Pressing PGM button for more than 2 seconds |
|---|---|---|---|
| Internal CD | PAUSE | ON/OFF | — |
| | REPEAT | ON/OFF | — |
| | RANDOM | ON/OFF | — |
| Tape | NR | ON/OFF | — |
| | B-SKIP | ON/OFF | — |
| | REPEAT | ON/OFF | — |
| Multi-CD* | PAUSE | ON/OFF | — |
| | REPEAT | Replay Range Switching | — |
| | RANDOM | ON/OFF | — |
| | LIST | It is Title List Mode | — |
| | ITS | Presetting | Replay |
| Radio | BSM | OFF | ON |
| | LOCAL | ON/OFF | Entering the Local Seek Sensitivity mode |

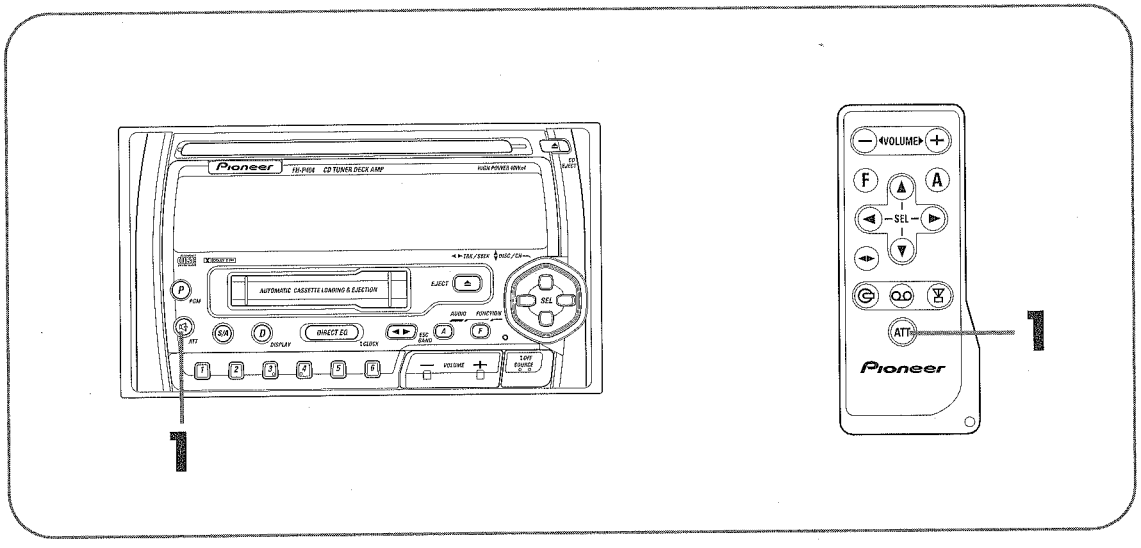
* Can be set only when a separately sold product is connected.

# Lowering the Volume Instantly

ATT



When you are having trouble hearing the conversation inside your car, you can instantly reduce the audio volume.




## 1 Instantly lower the volume.

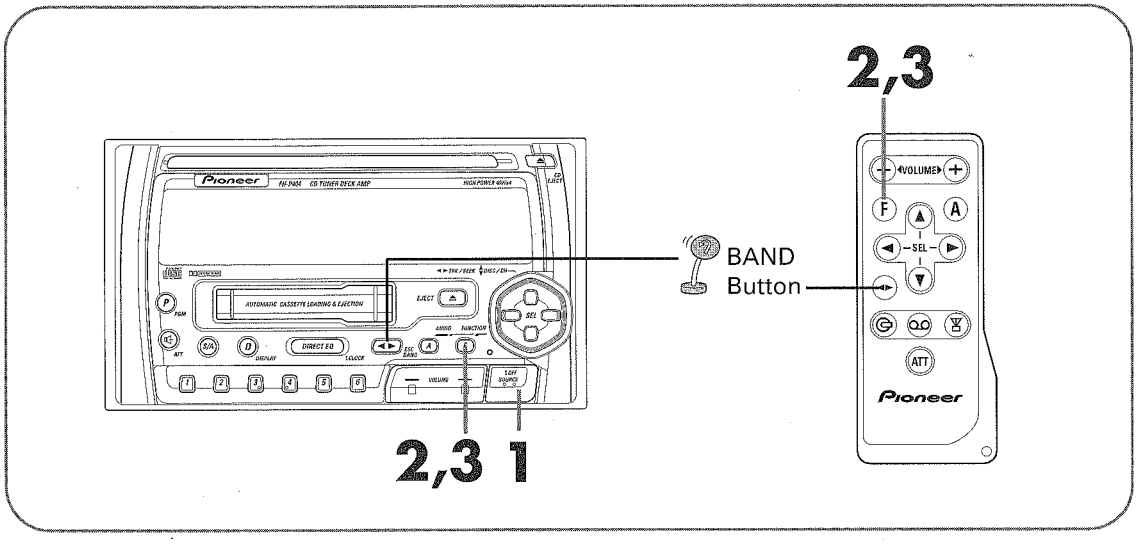
Press the ATT Button.

Each time you press this button, the function turns on or off.

- When the ATT is on, the volume is reduced to about 1/10.
- When the ATT is on, pressing the "+" or the "–" Button automatically turns off ATT. After the ATT turns off, the volume is close to the volume when it was on.

# Switching the Initial Setting Mode

You can switch to the necessary initial setting mode to perform all settings.




## 1 Turn off the power.

Press the SOURCE Button for 1 second or more. (See Page 16)

## 2 Select Initial Setting Mode.

Press the F Button for 2 seconds or more with the power off.
Initial Setting Mode is selected.

## 3 Switch the Initial Setting Mode.

Press the F Button.
Each time the button is pressed, the mode changes as shown below.

- Clock Mode (See Page 80)
- Calendar Mode (See Page 81)
- Dummy CD-M mode (See Page 82)
- AUX (External Component) Mode (See Page 83)
- Dimmer Mode (See Page 84)

### When you want to stop without completing an operation

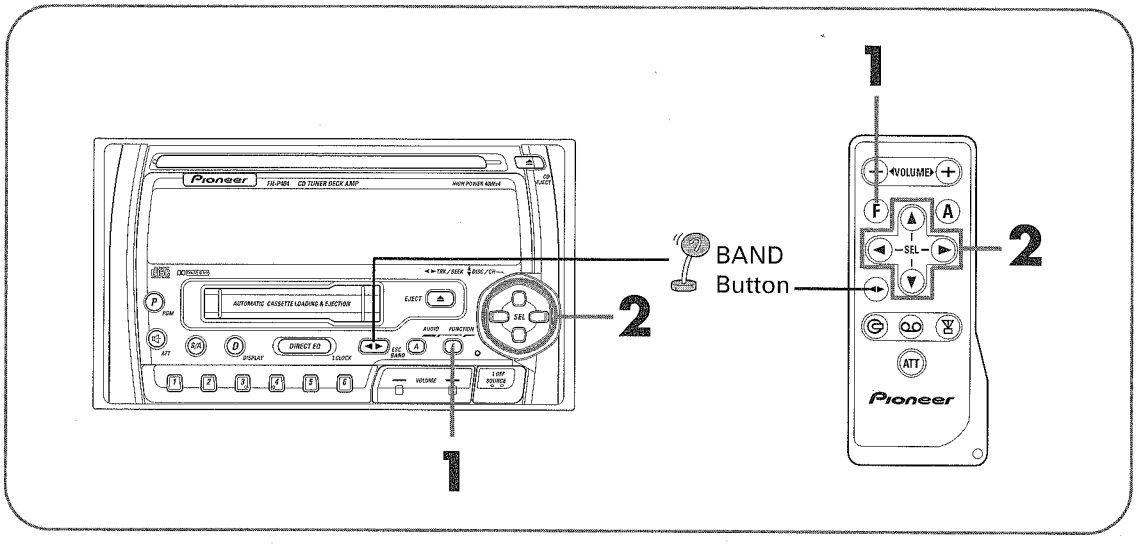
Press the BAND Button.
Initial Setting Mode is canceled. When it is canceled, the power turns off.

# Setting the Clock





You can set the correct time the first time you use the system.



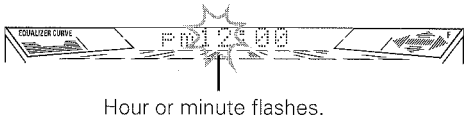

## 1 Select Clock Mode.

Press the F Button 2 seconds or more with the power off. (See Page 79)

## 2 Set the clock.

### ■ To select the part to be corrected

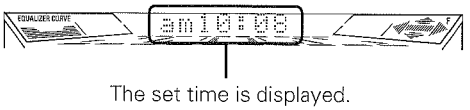
Press the ◄ or the ► Button.
Each time you press the button, it changes back and forth between hour and minute.



Hour or minute flashes.

### ■ To correct the time

Press the ▲ or the ▼ Button.
▲: To increase the number
▼: To reduce the number



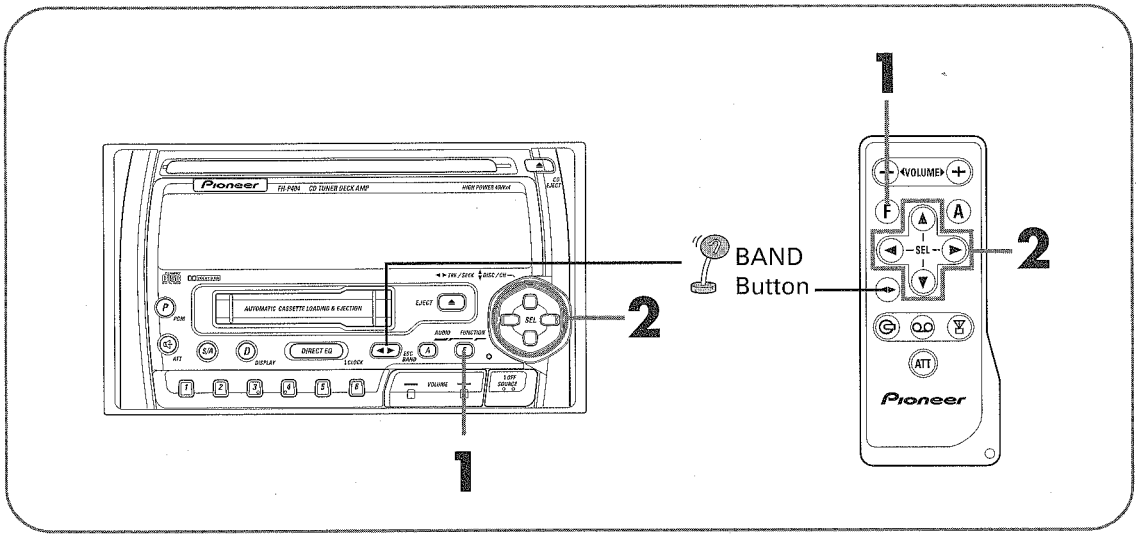
The set time is displayed.

When the operation is complete, press the BAND Button to cancel Initial Setting Mode.

# Setting the Calendar Date



You can set the correct date the first time you use the system.



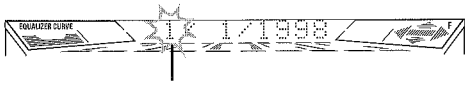

## 1 Select Calendar Mode.

Press the F Button 2 seconds or more with the power off, then press the F Button to select Calendar Mode.
(See Page 79)

## 2 Set the date.

### ■ To select the part to be corrected

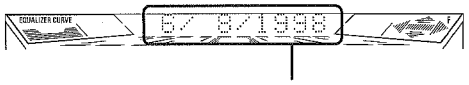
Press the ◄ or the ► Button.
Each time you press the button, it changes from day to month to year, then to day and so on.




Day, month, or year flashes.

### ■ To correct the date

Press the ▲ or the ▼ Button.
▲: To increase the number
▼: To reduce the number




The set day, month, and year are displayed.

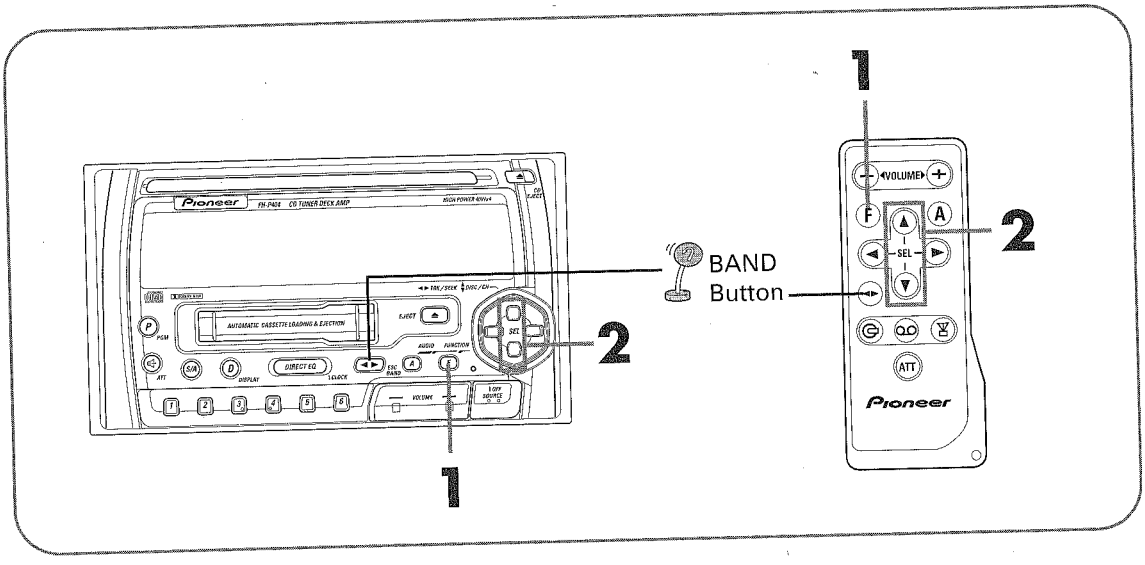
When the operation is complete, press the BAND Button to cancel Initial Setting Mode.

- The year can be set between 1998 and 2097.

# Dummy CD Magazine



When the optional multi CD player is not connected, switching the input using the SOURCE or CD button will display the multi CD. This display can also be turned OFF.

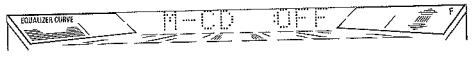



## 1 Set the dummy CD-M mode.

Hold the F button for 2 seconds or longer with the main unit power off, and press the F button. (See page 79)

## 2 Set the dummy CD-M to OFF.

Press the ▼ button (turns ON when the ▲ button is pressed).




After setting to OFF, press the BAND button, and exit the initial setting mode.

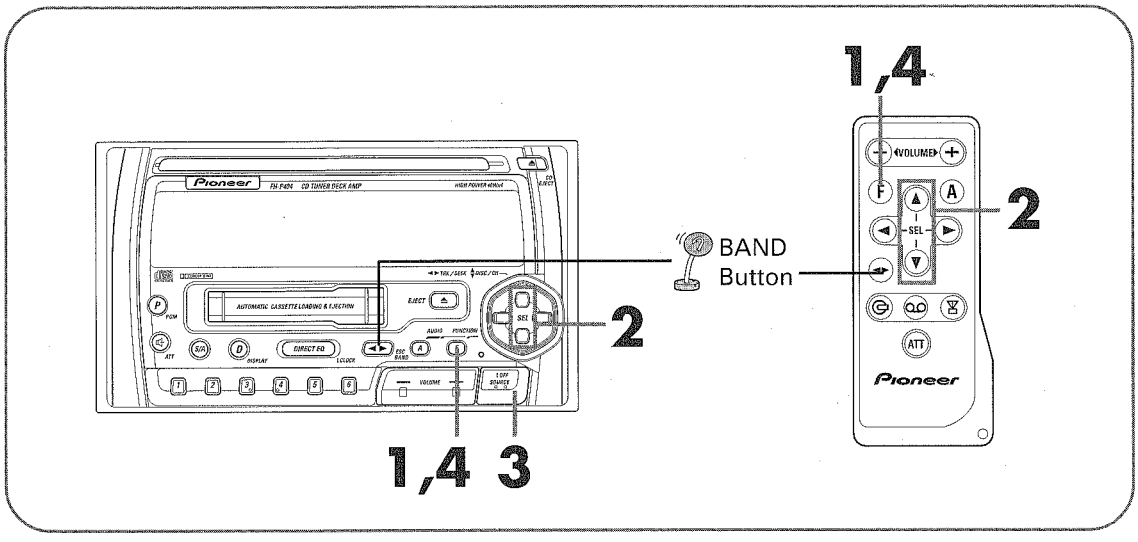
Precaution

- When connecting the optional multi CD player, be sure to set M-CD to ON.

# Listening to Sound from an External Component

AUX

You can hear sound from a DAT, VTR, or other external component that is connected to the main unit.




## 1 Select AUX (External Component) Mode.

Press the F Button 2 seconds or more with the power off, then press the F Button to select AUX Mode. (See Page 79)

## 2 Turn on the AUX (External Component) function.

Press the ▲ Button. (Press the ▼ Button to turn it off.)

When the operation is complete, press the BAND Button to cancel Initial Setting Mode.

## 3 Select AUX as the sound source.

Press the SOURCE Button to select AUX. (See Page 16)

When the sound source is AUX, sound from an external component is output.

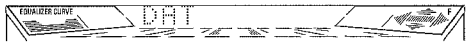
## 4 Select AUX Name Entry Mode.

Press the F Button for 2 seconds or more.
Name Entry Mode is selected.

Displayed for about 2 seconds.

## 5 Enter and preset an AUX name.

Referring to CD title entry procedure steps 3 to 5 (see Pages 24 and 25), perform the same operations.




The entered name is displayed.

### Connection With an External Component

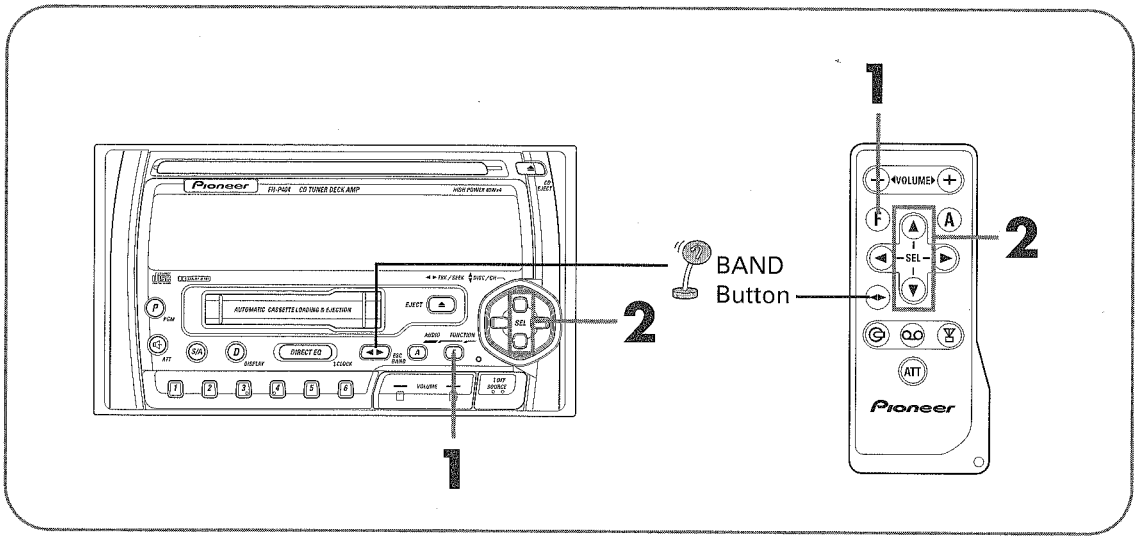
Using a separately sold RCA/IP-BUS interconnector ("CD-RB20" or "CD- RB10"), you can connect a DAT or VTR providing RCA output to your main unit as an external component. For details, see the RCA/IP-BUS interconnector operating instructions.

# Varying the Brightness of the Nighttime Display

## Dimmer



When you turn on your car's headlights, the dimmer darkens the display so that the display will not be overly bright at night or in dark surroundings. This dimmer function can be turned off.




### 1 Select Dimmer Mode.

Press the F Button 2 seconds or more with the power off, then press the F Button to select Dimmer Mode. (See Page 79)

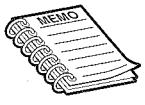
### 2 Turn off the Dimmer Mode.

Press the ▼ Button. (Press the ▲ Button to turn it back on.)

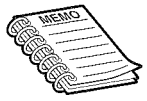
When the operation is complete, press the BAND Button to cancel Initial Setting Mode.

# Before Connection



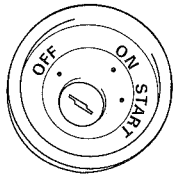



- This unit is for vehicles with a 12-volt battery and negative grounding. Before installing it in a recreational vehicle, truck, or bus, check the battery voltage.
- To avoid shorts in the electrical system, be sure to disconnect the ⊖ battery cable before beginning installation.
- Refer to the owner's manual for details on connecting the power amp and other units, then make connections correctly.
- Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap adhesive tape around them where they lie against metal parts.
- Route and secure all wiring so it cannot touch any moving parts, such as the gear shift, handbrake, and seat rails. Do not route wiring in places that get hot, such as near the heater outlet. If the insulation of the wiring melts or gets torn, there is a danger of the wiring short-circuiting to the vehicle body.
- Don't pass the yellow lead through a hole into the engine compartment to connect to the battery. This will damage the lead insulation and cause a very dangerous short.
- Do not shorten any leads. If you do, the protection circuit may fail to work when it should.
- Never feed power to other equipment by cutting the insulation of the power supply lead of the unit and tapping into the lead. The current capacity of the lead will be exceeded, causing overheating.
- When replacing fuse, be sure to use only fuse of the rating prescribed on the fuse holder.
- Since a unique BPTL circuit is employed, never wire so the speaker leads are directly grounded or the left and right ⊖ speaker leads are common.
- The black lead is the ground. Please ground this lead separately from the ground of high-current products such as power amps.
  If you ground the products together and the ground becomes detached, there is a risk of damage to the products or fire.




- Speakers connected to this unit must be high-power types possessing minimum rating of 40 W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here can damage the speakers.
- When an external power amp is being used with this system, be sure not to connect the blue/white lead to the amp's power terminal. Likewise, do not connect the blue/white lead to the power terminal of the auto-antenna. Such connection could cause excessive current drain and malfunction.
- To prevent incorrect connection, the input side of the IP-BUS connector is blue, and the output side is black. Connect the connectors of the same colors correctly.
- If this unit is installed in a vehicle that does not have an ACC (accessory) position on the ignition switch, the red lead of the unit should be connected to a terminal coupled with ignition switch ON/OFF operations. If this is not done, the vehicle battery may be drained when you are away from the vehicle for several hours.

ACC position

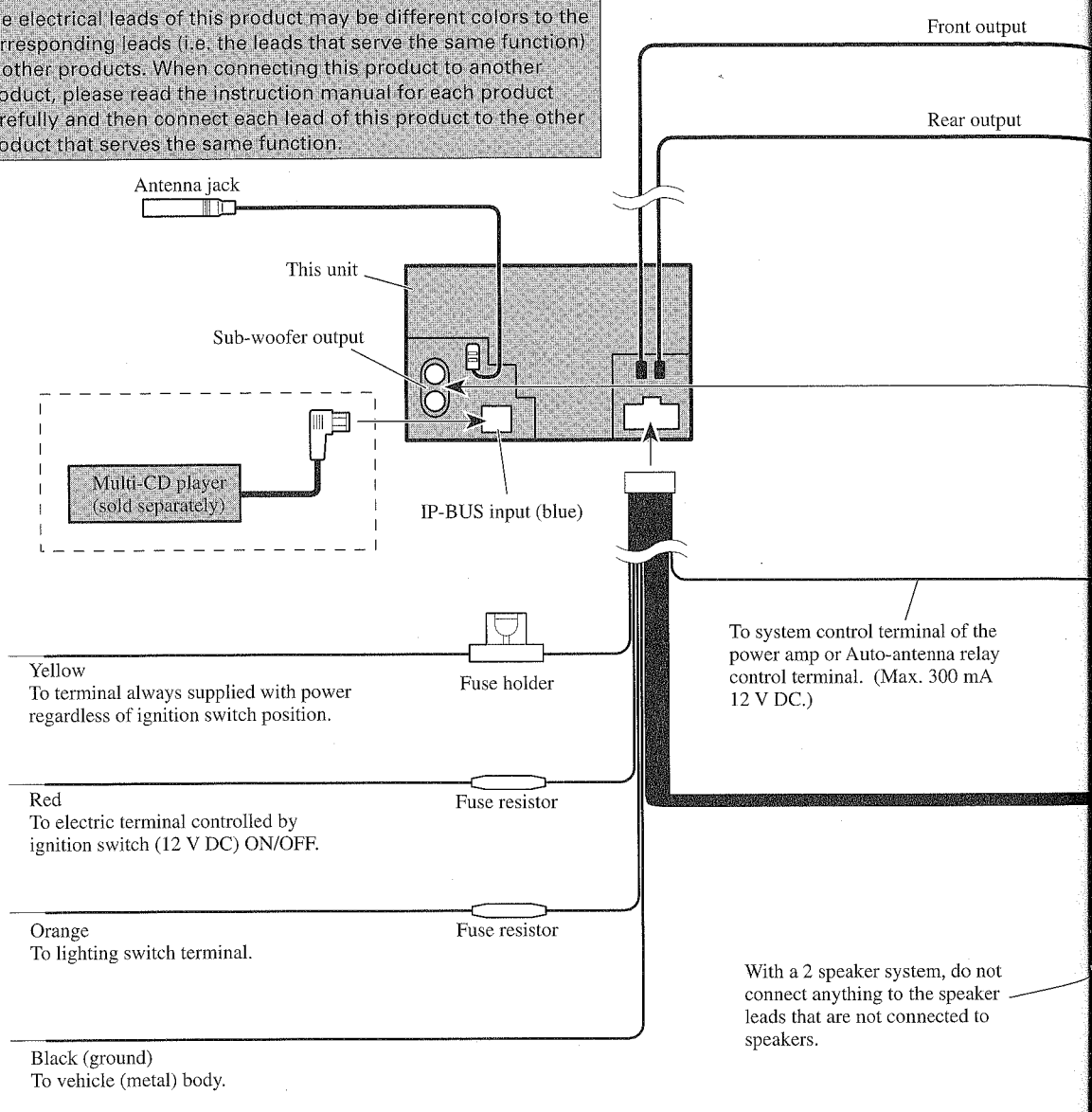


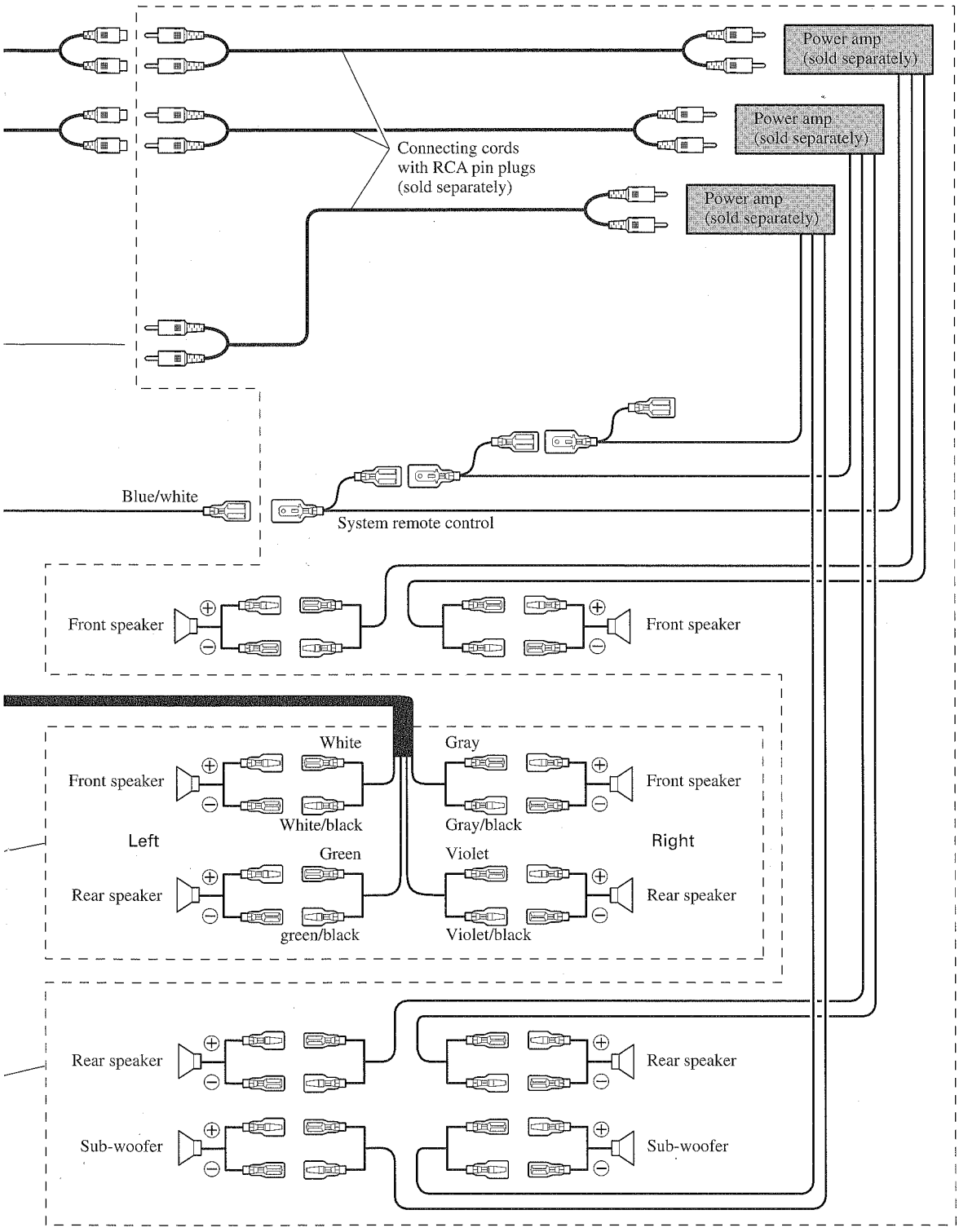

No ACC position

# Connecting the Units



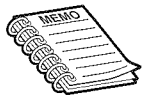
**⚠ CAUTION:**
The electrical leads of this product may be different colors to the corresponding leads (i.e. the leads that serve the same function) of other products. When connecting this product to another product, please read the instruction manual for each product carefully and then connect each lead of this product to the other product that serves the same function.


Front output
Rear output
Antenna jack
This unit
Sub-woofer output
Multi-CD player (sold separately)
IP-BUS input (blue)
To system control terminal of the power amp or Auto-antenna relay control terminal. (Max. 300 mA 12 V DC.)
Yellow
To terminal always supplied with power regardless of ignition switch position.
Fuse holder
Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Fuse resistor
Orange
To lighting switch terminal.
Fuse resistor
With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
Black (ground)
To vehicle (metal) body.
Perform these connections when using a different amp (sold separately).

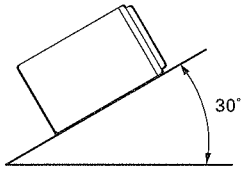

Power amp
(sold separately)
Power amp
(sold separately)
Power amp
(sold separately)
Connecting cords
with RCA pin plugs
(sold separately)
Blue/white
System remote control
Front speaker
Front speaker
White
Gray
Front speaker
Front speaker
White/black
Gray/black
Left
Right
Green
Violet
Rear speaker
Rear speaker
green/black
Violet/black
Rear speaker
Rear speaker
Sub-woofer
Sub-woofer

# Before Installation






- Before finally installing the unit, connect the wiring temporarily, making sure it is all connected up properly, and the unit and the system work properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- The semiconductor laser will be damaged if it overheats, so don't install the unit anywhere hot — for instance, near a heater outlet.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.



- In some types of automobiles, discrepancy may occur between the main unit and the dash board. If this happens, use the supplied panel to fill the gap (peel off the protection tape before use).

# Installing the Unit

## Installing the unit in Toyota or Nissan vehicles

### 1 Remove the car radio or glove compartment

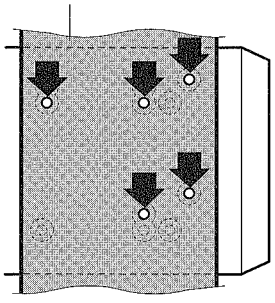
Once removed, there is a bracket for holding the radio or glove compartment. Use this bracket to install the main unit.

### 2 Check the location of screws

Lay the bracket on top of the main unit and check the location of holes.

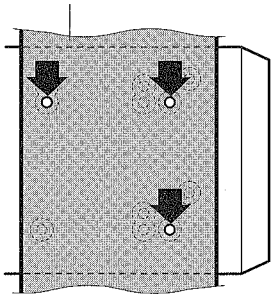
Toyota

Bracket for a Toyota

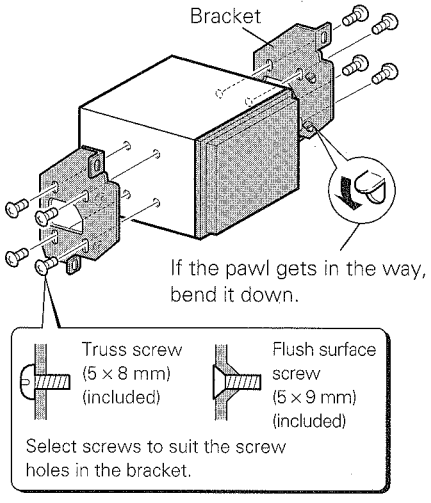


Nissan

Bracket for a Nissan



### 3 Attach the main unit on to the bracket using the supplied screws


Bracket
If the pawl gets in the way, bend it down.
Truss screw (5 × 8 mm) (included)
Flush surface screw (5 × 9 mm) (included)
Select screws to suit the screw holes in the bracket.

# Precautions (Correct Use of CD)

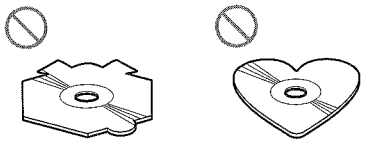


## Usable CD Discs

- Use compact discs (optical digital audio discs) that bear the following symbol on their disk title surface.

COMPACT disc DIGITAL AUDIO

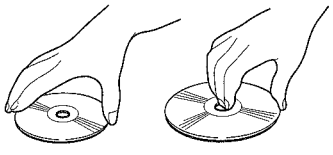
- Do not use discs with special shapes. This could cause the unit to malfunction.



- Do not use cracked, scratched, or warped discs.

## Handling Precautions

- Hold a CD so that your hands do not touch the recording surface (the shiny rainbow colored part) as shown below.



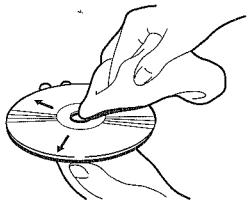
- Do not scratch a CD.
- Do not apply paper or seals to a CD.

## Storage Precautions

- Do not store a CD in a hot place or where it is exposed to direct sunlight.
- Always store CDs in their cases so they will not warp.

## CD Care

- If a CD is soiled, wipe it off gently from the inside towards the outside with a soft clean cloth.



- Do not use benzene, thinner, or other volatile chemical to clean a CD. And do not clean a CD with cleaners or static electricity prevention agents made for analog records.

## CD Playing Environment

- The sound may jump in response to the shock of vibration while your car is moving.
- If you replay a CD during cold weather immediately after you have turned on the heater, it may not replay properly because of condensed water vapor on the CD or on the lenses in the optical system.
  When this happens, wait about 1 hour for the moisture to disappear naturally. Use a soft cloth to wipe moisture off the CD.

- While product design has accounted for this problem, a CD may have surface scratches that are not serious enough to interfere with its use as a result of the effects of the mechanism, utilization environment, or disc handling. This is not an indication of a product malfunction. It is ordinary wear.

# Precautions (Correct Use of Tapes)

## Usable Tapes

- Do not use a tape with a label that is not firmly attached to the tape. The label will catch on the inside of the tape deck preventing its extraction. Use this tape after removing the loose parts of the label.
- Use tapes up to C-90 (90 minute tapes).
- Do not use C-120 tapes (120 minute tapes). Because these tapes are extremely thin, the tape may wrap around rotating parts or be broken.

## Tape Storage Precautions

- Do not store tapes in a hot place or where they are exposed to direct sunlight. This deforms tapes.
- Do not store tapes close to speakers, magnets, or other places where there is magnetism.
- When not listening to a tape, store the tape in its cassette case so that it will not become slack.

## Head Care

- Clean your tape head once or twice a month. If a head becomes extremely dirty, the sound deteriorates or skipping occurs. Remember to clean it regularly.

# When These Messages Are Displayed



## CD Error Display

When a CD can not be played correctly, an error message is displayed.

| Message (Error Code) | When the Message is Displayed | Action |
|---|---|---|
| ERROR-11 ERROR-12 ERROR-17 ERROR-30 | The CD is dirty. | Clean off the CD (see Page 92). |
| | The CD is scratched or cracked. | Replace the CD. |
| ERROR-14 | A recordable type CD (CD-R) is being used without being recorded. | Use the recordable type (CD-R) after recording it. |
| ERROR-10 ERROR-11 ERROR-12 ERROR-14 ERROR-17 ERROR-30 ERROR-A0 | There may be a malfunction in the electrical or mechanical system. | Either turn the car's engine switch off and on again, or stop playing the CD and start playing it again. |

- When any error code other than those listed above is displayed during Multi CD replay, check the Multi CD operating instructions.

# When You Think its Broken

**You think its broken.**

Before having it serviced, check the items in the following table.

**You have checked it but it still doesn't work.**

Reset the main unit (see Page 7).

## ■ Common Items

| Symptom | Cause | Action |
|---|---|---|
| The power does not come on.<br>It doesn't start. | A lead wire or connector is not properly connected. | Check once more to make sure that they are correctly and securely connected. (see Page 88) |
| No sound is heard.<br>The sound is low. | The volume is turned down. | Raise the volume (see Pages 17 to 20). |
| | The ATT is on. | Turn off the ATT (see Page 78). |
| Either the front or rear speakers do not work or their sound is low. | The front/rear volume balance is not correctly adjusted. | Adjust the front/rear volume balance (see Page 67). |
| Either the left or right speakers do not work or their sound is low. | The left/right volume balance is not correctly adjusted. | Adjust the left/right volume balance (see Page 67). |
| The remote controller does not work. | The battery is low. | Replace the battery (see Page 7). |
| | The battery is inserted with its ⊕ and ⊖ terminals reversed. | Insert it correctly (see Page 7). |
| | You are aiming it at your feet or the seat. | Aim it at the main unit to use it. |
| | Sunlight is shining directly on the main unit. | Hold the remote controller near the main unit to use it. |

# When you Think its Broken (continued)

## ■ CD

| Symptom | Cause | Action |
|---|---|---|
| The CD won't go in. | Another CD is already inside. | Take out the other CD and put the one you want to play in again (see Pages 10 and 17). |
| The sound jumps, is intermittent, or there is considerable noise. | The CD is dirty.<br>The CD is scratched.<br>The CD is severely warped.<br>There is condensation or water drops on the CD. | Clean the CD (see Page 92) or replace it with another CD. |
| The CD is ejected immediately after you insert it. | You put the CD in upside down. | Put the CD in again with its title surface upwards (see Page 10 and 17). |
| The CD sound is intermittent. | There is a label or tape on the CD. | Completely remove the label or tape (see Page 92). |
| An error message is displayed. | The CD player is malfunctioning. | Refer to the table of CD error messages and check the content of the message (see Page 94). |

## ■ Radio

| Symptom | Cause | Action |
|---|---|---|
| You hear a lot of noise: jii jii or zaa zaa. | The radio is not tuned to the station's frequency. | Tune the radio to the exact frequency (see Page 19). |
| | The radio station's signal is weak. | Select another radio station (see Page 19). |
| | Reception conditions are poor, perhaps because of a nearby obstruction. | When reception conditions improve, the noise will diminish. |
| Automatic tuning does not work. | The radio station's signal is weak. | Tune it manually (see Page 19). |

## ■ Tape

| Symptom | Cause | Action |
|---|---|---|
| The side being played automatically changes while the tape is playing. | The tape is twisted. | Replace the tape. |
| The sound quality is poor. | The tape is not properly wound in the cassette. | Fast forward or rewind the tape so that it is properly wound (see Page 34). |
| | The tape was badly recorded. | Replace it with another tape. If the other tape works properly, the problem is the tape. |
| | Dolby NR is not working correctly. | Turn your main unit's Dolby NR on or off to match the Dolby NR that was used to record the tape (see Page 40). |
| | The tape head is dirty. | Clean the dirt off the tape head (see Page 93). |
| Search does not work correctly. Repeat play does not work correctly. | There is no gap greater than 4 seconds between musical numbers on the tape. | Use a tape with gaps longer than 4 seconds. |
| | The tape contains blank parts more than 4 seconds long; a conversation for example. | When a tape with content of these kinds is used, these parts are treated as "gaps" so search and repeat play can not be done correctly. |
| | During a musical number, there are extremely quiet parts longer than 4 seconds. | |
| After the tape is inserted, it does not play correctly. | The tape is broken or tangled. | Replace the tape. |
| You can not hear any sound. | The tape has not been recorded. | Replace it with a tape that has been recorded. |

# Principal Specifications



## ■ Tape Deck

| | |
|---|---|
| **Tape packs used** | : Compact cassette (C-30 to C-90) |
| **Tape speed** | : 4.8 cm/sec. |
| **Fast forward/ rewind speed** | : approx. 100 seconds (C-60) |
| **Wow and flutter** | : 0.09% (WRMS) |
| **Replay frequency response** | : Metal tape: 30 to 19,000 Hz (± 3dB) |
| **Stereo separation** | : 45 dB |
| **S/N** | : Metal Tape: Dolby B NR IN 67 dB (IHF-A network) Dolby NR OUT 61dB (IHF-A network) |

## ■ CD Player

| | |
|---|---|
| **Model** | : Compact disc audio system |
| **Discs used** | : Compact discs |
| **Signal format** | : Sampling frequency: 44.1 kHz, Quantized bit number: 16 bits linear |
| **Frequency response** | : 5 to 20,000 Hz |
| **S/N** | : 86 dB (1 kHz) (IHF-A network) |
| **Dynamic range** | : 90 dB (1 kHz) |
| **Channels** | : 2 (stereo) |

## ■ FM Tuner

| | |
|---|---|
| **Reception frequency range** | : 87.9 to 107.9 MHz |
| **Usable sensitivity** | : 11 dBf (0.8 µV/75 Ω, monaural, S/N: 30 dB) |
| **S/N 50 dB sensitivity** | : 16 dBf (1.1 µV/75 Ω, monaural) |
| **S/N** | : 70 dB (IHF-A network) |
| **Harmonic distortion factor** | : 0.3% (65 dBf input, 1 kHz, stereo) |
| **Frequency response** | : 30 to 15,000 Hz (± 3 dB) |
| **Stereo separation** | : 40 dB (65 dBf input, 1 kHz) |
| **Usable selectivity** | : 70 dB (2ACA) |
| **Three signal I.M. (Desire signal level)** | : 50 dB (two undesire signal level: 110 dBf) |

## ■ AM tuner

| | |
|---|---|
| **Reception frequency range** | : 530 to 1.710 kHz (10 kHz) |
| **Usable sensitivity** | : 18 µV (S/N: 20 dB) |
| **Effective selectivity** | : 50 dB (± 10 kHz) |

## ■ Amplifier/Common Components

| | |
|---|---|
| **Max. power consumption** | : 10.0 A |
| **Max. output** | : 40 W × 4 |
| **Rated output** | : 20 W × 4 (50 to 15,000 Hz, 5%) |
| **Loudness contour** | : 10 dB (100 Hz) 7 dB (10 kHz) (Volume: –30 dB) |
| **Load impedance** | : 4 Ω (4 to 8 Ω usable) |
| **Preout output level** | : 500 mV (Max. 1.7 V) |
| **Output impedance** | : 1 kΩ |
| **Power source** | : DC 14.4 V (10.8 to 15.1 V usable) |
| **Grounding method** | : Minus grounding method |
| **Installed dimensions** | : 178 (W) × 100 (H) × 155 (D) mm |
| **Nose dimensions** | : 170 (W) × 96 (H) × 17.5 (D) mm |
| **Weight** | : 2.3 kg (not including cord) |

## Audio

**Sub woofer crossover frequencies** : 50 Hz, 80 Hz, 125 Hz.
**Sub woofer crossover slope** : 12 dB/oct.
**Sub woofer crossover slope adjustment range** : ± 12 dB

## Accessories

**Cords** : 1 set
**Attachment screws** : 1 set
**Instruction manual** : 1
**Installation manual** : 1
**Remote controller** : 1
**Mounting trim panel** : 1
**CR2032 lithium battery** : 1

- The above specifications and external appearance may change without warning. The illustrations in this manual may differ a little from the actual product.

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